# The RUBBER AGE

Published TWICE-A-MONTH at New York

Vol. 20 JANUARY 10, 1927 No. 7



**R. T. VANDERBILT CO.**
INCORPORATED
50 East 42nd Street, New York

## What Can Our Products Do For You?

Isn't the Company and its Compounder helped and saved annoyance and financial loss if they use Good, Reliable, Dependable Materials at Fair Prices?

In the end isn't that a part of the solution to satisfactory and economical compounding?

WAREHOUSES:

AKRON
Union Terminal Warehouse
East South & Brooks Sts.

BOSTON
Francis Fitz Company
30 Pittsburgh St.

CHICAGO
Midland Warehouse & Transfer Co.
43rd & Robey Sts.

SAN FRANCISCO
Haslett Warehouse Co.
60 California St.

TORONTO
Toronto Storage Co.
17 River St.

TRENTON
Anchor Warehouse Co.
N. Y. & Olden Ave.

# Reclaimed Rubber

*For All Purposes*

QUALITY

VALUE

SERVICE

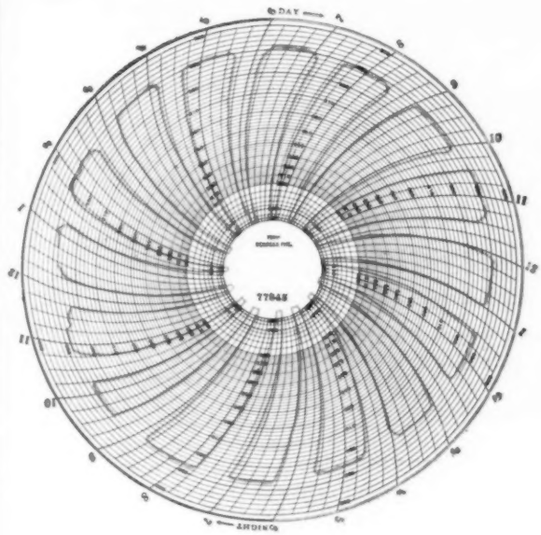
RUBBER REGENERATING COMPANY

*Largest Reclaimers in the World*

(FOUR FACTORIES)

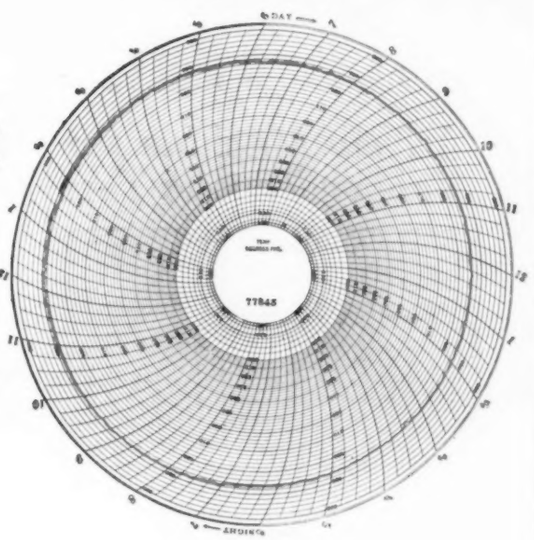
**Naugatuck, Conn.**

MISHAWAKA, IND. MONTREAL, CAN. MANCHESTER, ENG.



PRESS VULCANIZER

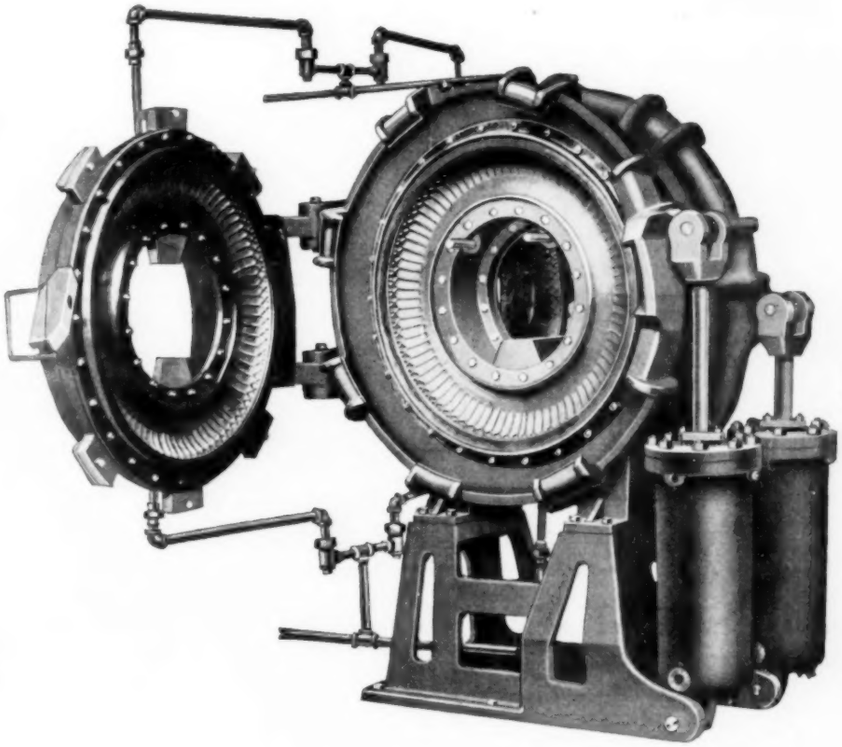
# Close the Gaps



WATCH CASE

Speedier Production

Easily Operated



Uniform Cure

Reduced Maintenance

Inter-changeable

Inter-changeable

GUARDS QUALITY **The "MINUTE MAN"** REDUCES COST

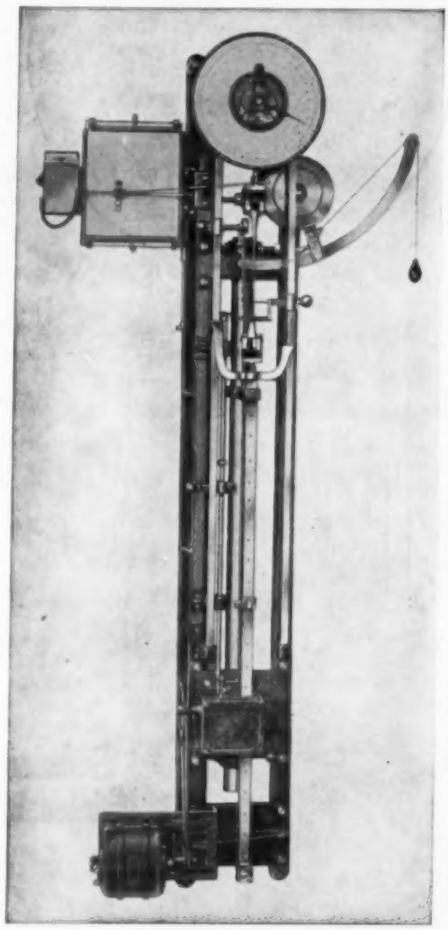
*Descriptive Literature Upon Request—Ask for it.*

## The Akron Rubber Mold & Machine Co.

AKRON, OHIO, U. S. A.

# SCOTT TESTERS

## *A New Machine for Rubber Tensile Test*



***Moving Jaw Returns to Starting Position INSTANTANEOUSLY.***

The cut shows a new form of recorder and machine arrangement for registering tests results in STRESS STRAIN DIAGRAM FORM in terms of TENSILE PER SQUARE INCH.

MANUFACTURED BY

**HENRY L. SCOTT CO.**

**PROVIDENCE, R. I.**

REPRESENTED IN AKRON, OHIO BY

**PROF. H. E. SIMMONS,**
MUNICIPAL UNIVERSITY



# *The* RUBBER AGE

*Published Twice-a-Month by*

The PALMERTON PUBLISHING CO., Inc.
Fisk Building, 250 West 57th. St., N. Y. City

P. L. PALMERTON, *Editor* — PETER P. PINTO, *Business Manager*

Vol. 20 JANUARY 10, 1927 No. 7


## *Table of Contents*


NEWS SECTION

Fisk Sales Decline $6,848,634 .....323
1926 was Important Year in Rubber World .323
Charge Seiberling Mismanaged Goodyear ..324
Rumors of Mohawk Merger Denied .....324
Thompson Makes Philippine Report .....325
Goodyear Wins Tax Decision .....326
Lawrence & Co. Loses Three Members .....326
British Inclined to Favor Pool .....327
Canadian Output Gains .....328
Firestone, Jr.. on Way Home .....328
Time Limit Extended on Notices .....329
Balloon Usage Growing Steadily .....330
To Open Reclaiming Plant .....331
Ginnings Reported as 15,542,249 Bales .....332
Ajax Denies Merger Rumor .....333
Favor Use of Livelier Tennis Ball .....334

FEATURES and DEPARTMENTS

Editorial Comment .....339
A Bus Line Without Spare Tires .....341
Surface Effects in Rubberizing .....342
Farmers to Find Guayule Profitable .....344
Papua, The Future Malaya .....345
London Letter .....349

MARKETS and STATISTICS

Crude, Scrap and Reclaimed Rubber .....351
Chemicals and Compounding Ingredients ..353
Cotton and Fabrics .....355
Statistics .....357

ADVERTISING INDEX .....365
MARKET PLACE LISTINGS .....359, 361, 363, 364


*Entered as Second Class Matter, June 10, 1920, at the Post Office at Highland, N. Y., under Act of March 3, 1879.*

*Contents Copyrighted 1927 by The Palmerton Publishing Co., Inc.*

# The second significant change in 7 months —

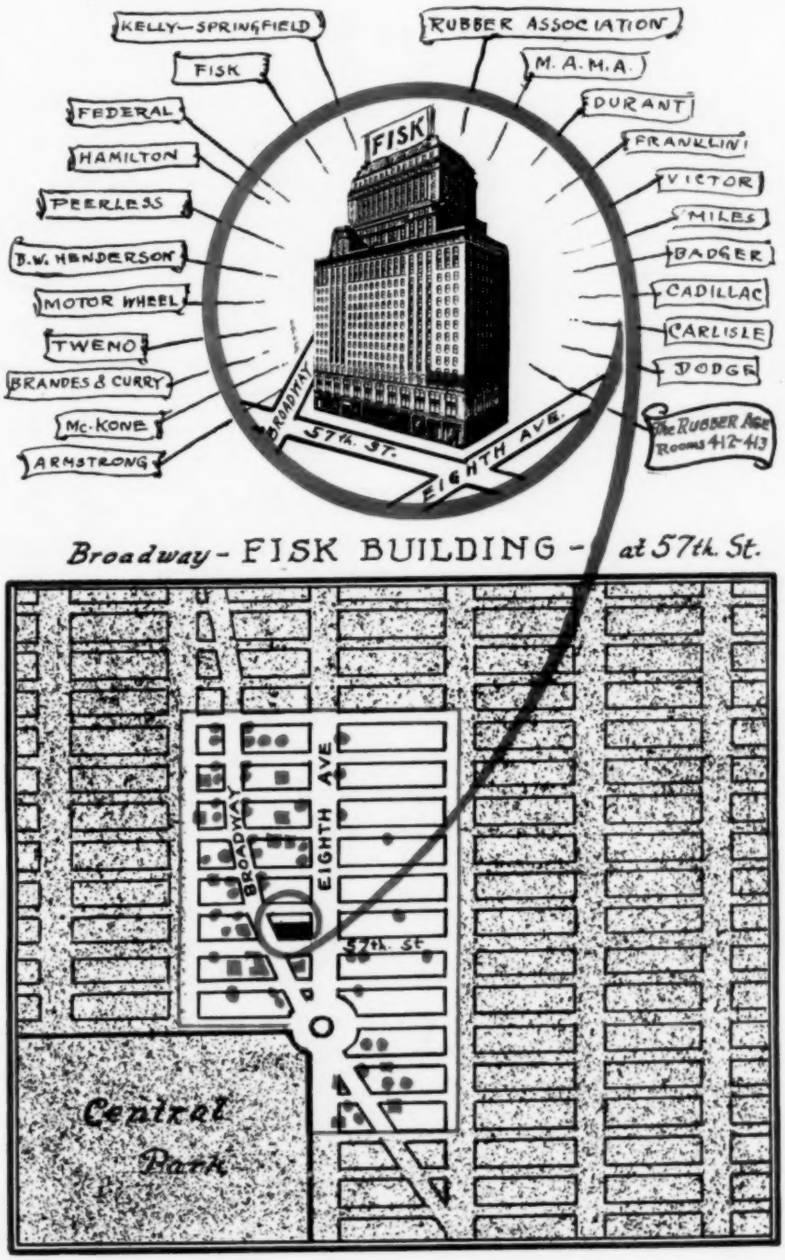
## THE RUBBER AGE is now located in the Fisk Building, 250 West 57th St., N. Y. in the Heart of the Rubber and Automotive District

FOLLOWING the change in ownership of THE RUBBER AGE last June, since which time a new record for growth has been made, now comes the announcement that THE RUBBER AGE has made its second significant change.

This time it is the removal of its general offices to new and larger quarters in the Fisk Building at 250 West 57th Street, New York, in a neighborhood which might well be called the Rubber and Automotive Headquarters of the World.

In the same building, across a single street, or within a scant half dozen blocks will be found either the head offices or the principal sales offices of dozens of the most important rubber and automobile manufacturers. The location of some of these companies, with respect to the Fisk Building, is indicated by the red dots on the accompanying map. The chart above shows the impressive list of concerns with whom THE RUBBER AGE will be neighbors within the building itself.

Location in such a district means that THE RUBBER AGE will have even greater opportunities for giving its readers the latest and most complete news, market and technical developments *first*.—And to those concerns already using or contemplating the use of THE RUBBER AGE for their advertising, this change assures a rubber trade publication of ever-widening influence and increasing prestige.




THE RUBBER AGE
FISK BUILDING
250 West 57th St., New York

THE NAUGATUCK CHEMICAL COMPANY
NEW YORK

Materials
*for the*
Rubber Goods
Manufacturer

THE products listed below are being furnished regularly to the manufacturers of rubber goods. This large number of active materials shows the close attention given to the needs and interests of the Rubber Trade.

HEPTENE—Accelerator for tubes, tire carcass, rubber bands, and pure gum goods generally.

MONEX—Ultra-accelerator for general use.

TRIMENE BASE—Accelerator for tire treads, footwear, and rubberized sheetings.

TRIMENE—Accelerator made to replace HEXA.

CRYLENE—Accelerator for hard rubber goods, and cheap black mechanicals. Made in two forms—the hard resinous, and the paste.

LITHEX—Co-accelerator for use with litharge in all types of goods.

VGB—Antioxidant for rubber, balata, gutta, guayule, and reclaim.

ZBX—Zincbutylxanthate accelerator for use with various amines in making stocks and cements to vulcanize at room temperature or above.

MINERAL FLOUR—Florida clay, the highest reinforcing clay available.

LABELS—All-rubber two-color brands for tires, hose, belts, etc.

LATEX—Normal consistency, and in concentrations up to 80% rubber content.

LOTOL—Modified latex products for many uses. Penetrating, adhesive, and spreading.

THE NAUGATUCK CHEMICAL CO.
1790 BROADWAY
NEW YORK CITY, N. Y.

JAN10'27

©C1B 732200

The
# RUBBER AGE

The Only Twice-a-Month Rubber Publication

Vol. 20 NEW YORK, JANUARY 10, 1927. No. 7

## FISK SALES DECLINE $6,848,634 IN YEAR

**Fisk Rubber Company Reports for Year Ended Oct. 31, 1926, Net Profit of $3,354,431, Against $6,108,905 in Previous Year—Gross Sales Aggregated $68,051,739.**

The Fisk Rubber Company for the twelve months ended Oct. 31, 1926, showed a net profit of $3,354,431, after depreciation, interest, Federal taxes and reserves of $1,000,000 for contingencies. This is equal, after a year's dividends on all classes of preferred and management stocks, to $2.23 a share on the 825,116 shares of no par common stock, and compares with a net profit of $6,108,905, or $5.86 a share on 808,255 shares outstanding in the previous year. Gross sales for 1926 of $68,051,739, compare with those in the previous fiscal year of $74,900,373, a decline of $6,848,634.

H. T. Dunn, president, in his remarks to stockholders, attributes the decline in gross sales and net profit to the drop in the cost of crude rubber and cotton. He said in part:

"The tire industry in 1926 contended against a drastic decline in the prices of its two chief raw materials—crude rubber and cotton. Regardless of this condition, gross sales less returns and allowances for the year amounted to $68,051,739 and operating profits after depreciation, but before interest and taxes, were approximately $6,000,000. As 1925 was a year of inflation in crude rubber prices and 1926 a year of deflation, normal earning power may be regarded as the average of the two years.

Inventories as of Oct. 31 were taken on a conservative basis from which is deducted an amount set aside of $1,000,000 as a reserve against possible future contingencies. The major part of the contingency reserve of $1,500,000 set aside last year has been used for the cancellation and readjustment of fabric contracts applicable to future years.

"The outlook is good for a satisfactory volume of business in 1927. Stabilized raw material markets should assure satisfactory profits on that business."

### R.A.A. BANQUET

**Arthur ("Bugs") Baer, famous newspaper humorist, will be a speaker at the twenty-seventh annual dinner of the Rubber Association of America which will be held on the evening of January 10 at the Hotel Commodore in New York City. The banquet committee has also announced that the guests will hear John Charles Thomas, a baritone of concert and operatic fame.**

**Up until January 5 the committee was unable to make a definite announcement concerning other speakers although it was said to be assured that a prominent New York business man and an educator would be among them. The committee contemplates having three speakers in addition to Mr. Baer.**

**The Association is following its usual custom of seating groups r individual members as requested by them. However, late reservations cannot be assured of seating at particular tables.**

Consolidated income account for the year ended Oct. 31, 1926, compares with the previous fiscal year as follows:

| | 1926 | 1925 |
|---|---|---|
| Gross sales | $68,051,739 | $74,900,373 |
| Expenses, dep., etc. | 62,054,823 | 64,976,986 |
| Oper. profit | 5,996,916 | 9,923,387 |
| Other income | 21,921 | 58,425 |
| Total income | 6,018,837 | 9,981,812 |
| Interest, etc. | 1,664,406 | 183,279 |
| Federal tax reserve | .... | 1,350,000 |
| Contingency reserve | 1,000,000 | 1,500,000 |
| Net profit | 3,354,431 | 6,108,906 |
| First pfd. dividends | 1,200,738 | 1,025,696 |
| First pfd. convt. div. | 233,847 | .... |
| Management dividends | 1,050 | .... |
| Second pfd. dividends | 75,515 | .... |
| Surplus | 1,843,281 | 5,083,210 |
| Previous surplus | 13,431,980 | 8,348,770 |

## FIRESTONE TO BUILD ADDITION TO PLANT 2

The Firestone Tire & Rubber Co., Akron, has announced plans for an addition to Plant 2, for which bids closed Dec. 20. The new building will be 60 x 180 feet, five stories in height. The architects are Wilbur Watson and Associates, Cleveland. Bids were invited from nine construction companies.

## 1926 WAS IMPORTANT YEAR IN RUBBER WORLD

**Head of Rubber Exchange Reviews Year And Lists Seven Outstanding Features—Traces Growth of Exchange in Ten Months—Urges Rubber Growing in 1927.**

In reviewing the developments of 1926 which are of the greatest interest to the rubber industry, and the crude rubber trade F. R. Hendersen, president of the Rubber Exchange of New York, has listed the following among the outstanding features: the downward trend in crude rubber prices, the increase in the world's visible rubber supply, the increase in the use of reclaimed rubber, the establishment of the Rubber Exchange, the new restriction legislation by the British Colonial Office, the formation of a $40,000,000 buying pool by American interests, and the extension of British rubber planting interest to South America.

The world's production of crude rubber in 1926, according to Mr. Henderson's figures, exceeded the world's consumption by approximately 90,000 tons, thereby increasing the visible supply by that amount. "The consumption of crude rubber in the United States during 1926," he says, "was about 363,000 tons as compared with 389,000 in 1925. One reason for this decrease is the increased use of reclaimed rubber. The advance in knowledge of the use of organic accelerators in compounding has demonstrated that less crude rubber and more reclaimed rubber can be used without a proportionate sacrifice in quality. The consumption of reclaimed rubber in this country in 1926 reached about 165,000 tons whereas the 1925 consumption was only about 132,000 tons."

Trading on the Rubber Exchange since its inception in February had been quite active, but had there been a "bull" market instead of a "bear" market, Mr. Henderson explained, the volume of trading would have been far greater. Large manufacturers are reported as taking advantage of the price insurance offered by hedging their commitments on the Ex-

*(Concluded on Next Page)*

## RUMORS OF MERGER ARE DENIED BY MOHAWK CO.

S. S. Miller, president of the Mohawk Rubber Company, Akron, has issued a denial that the company contemplates a merger with smaller rubber companies. In a letter to dealers he spiked the rumor as entirely false and unfounded. "Mohawk will maintain its position absolutely alone," he said.

Officials of the Mohawk company expect a 35 per cent increase in business during 1927. Sales for 1926 are expected to be between $6,500,000 and $7,000,000.

### 1926 Was Important Year

(*Continued from Page* 323)

change. During ten months 135,275 tons of rubber changed hands by Exchange trading. This rubber had a value of $138,000,000.

The outstanding feature of the new year in rubber, in the opinion of the Rubber Exchange head, should be a definite beginning by American interests to develop their own rubber supply. The Philippine islands were suggested as offering the best possibilities in this direction.

### Rapson Official Here

H. J. Butler, managing director of the Rapson Tyre Co., Ltd., of Hobart, Tasmania, has been in the United States for the last few weeks consulting with American engineers and manufacturers of tire building equipment concerning the new plant which his company will erect and equip in Tasmania, on the edge of Australia. Mr. Butler has visited New York, Chicago and Akron. He previously visited several Canadian cities. After consulting with many interests in this country, he will visit England where final plans will be adopted.

The new tire plant is to have a weakly capacity of 3,500 tires. They will be primarily for the Australian market.

### Change Capital Structure

The U. S. Rubber Reclaiming Company, Inc., New York, has filed a certificate in the office of the Secretary of State at Albany for a change in its capital structure. The new capital consists of 80,000 shares of preferred stock of $25 par value; 38,400 shares of Class A preferred stock of no par value; and 100,000 shares of common stock of no par value.

Previous capital was 20,000 shares of preferred stock of 100 par value and 120,000 shares of common stock of no par value.

### British Goodrich Report

According to the statement of the managing director, read at the annual meeting of the company held recently in London, the British Goodrich Rubber Company increased its business considerably during the last year in spite of the declining price of crude rubber and the prolonged British coal strike. Tire sales were doubled and the sales of other items, chiefly mechanical goods, were increased fifty per cent or more. An especial improvement was reported in export business, particularly to British dominions and colonies.

## J. A. SWINEHART JOINS GILLETTE RUBBER CO.

J. A. Swinehart, widely known in the rubber industry as an inventor, became associated with the Gillette Rubber Company, Eau Claire, Wis., on Jan. 1. Mr. Swinehart, who recently celebrated his 70th birthday, is an extremely active man

J. A. Swinehart, noted Inventor, who has joined Gillette Rubber Company

and possesses one of the keenest inventive brains in the industry.

He is the holder of more than 20 patents, of which the side-wire truck tire is perhaps the best known. Mr. Swinehart obtained this patent while he was engaged in supervising the construction of the factory of the old Valley Rubber Company, New Philadelphia, in 1879. Later he met Harvey S. Firestone in Chicago and the newly patented tire became the property of the nascent Firestone Tire & Rubber Co. Mr. Firestone owned one-half of the stock of this company and Mr. Swinehart and his associates, who had purchased a three-fifths interest in the patent for $200, controlled the other half of the stock. Mr. Swinehart was make vice-president of the embryo company at a salary of $100 a month.

From 1905 to 1910 the inventor was connected with the Swinehart Clincher Tire Company, now known as the Swinehart Tire & Rubber Co., Akron, Ohio. This company was organized to manufacture Mr. Swinehart's cushion tire.

Since 1910 the inventor has been engaged in research and experimental work both in this country and in Europe. He has been associated with nine rubber factories in Europe and 21 in the United States.

### Holt to Visit Europe

E. G. Holt, chief of the Rubber Division of the Department of Commerce, will sail on January 12 for Europe where he will represent the Department in various matters. He expects to visit the International Rubber Exhibition in Paris and to gather information of interest to the American rubber trade and exporters of rubber goods.

## CHARGES SEIBERLING MISMANAGED GOODYEAR

**Defendant in Tomlinson Suit Attacks Former Gooyear President in Reply Filed January 3—Asserts Funds Were Misused —Seiberling Moves in Benedict Suit.**

F. A. Seiberling, former president of the Goodyear Tire and Rubber Company of Akron, was charged with causing the financial plight of the company in 1921 by mismanagement and misuse of funds, in an answer filed on January 3 by John Sherwin, Cleveland defendant in the suit of the Tomlinson stockholders to regain control of the firm, according to Associated Press dispatches from Akron.

In his answer Mr. Sherwin asserted that Mr. Seiberling used millions of the company funds for personal and private uses. Over the nine year period of 1912 to 1920 inclusive, Mr. Seiberling, who is still one of the Goodyear common stock voting trustees and also president of the Seiberling Rubber Company, used a total of $11,610,000 of corporate funds, it was alleged. According to Sherwin, these sums were used without authority of the company's directors, being replaced each year prior to the annual audit.

"Goodyear's acute distress in the fall of 1920 was not solely the result of the depression of that year, but was in large apart due to financial mismanagement," Mr. Sherwin asserted. "For years Goodyear had paid extravagant dividends in stock and cash and had failed to maintain either adequate reserves or working capital."

Mr. Sherwin categorically denied allegations made against him in the suit which asks that he be ousted as managing stock trustee.

On December 29 Federal Judge John M. Killits at Toledo continued until January 12 a temporary injunction restraining Mr. Seiberling and his associates from acting as common stock voting trustees of the Goodyear company. The Court's action was in connection with the suit filed against Mr. Seiberling and his associates by Mrs. K. G. Benedict, a New York stockholder. Counsel for Seiberling contended that Dillon, Read & Co., New York bankers, were backing Mrs. Benedict's suit and asked leave to subpoena witnesses to support their contention. The Court took the request under advisement.

Attorneys for the Goodyear company in a brief filed stated that there were three committees formed to transact business for the company under the plan of reorganization, namely, the bank creditors,' stockholders' and merchandise creditors' committees. These groups authorized all transactions completed under the 1921 refinancing plan. It was stated that Mr. Seiberling, as a member of the stockholders' committee, knew of the various refinancing details.

The Goodyear company in its brief asked that the petition for the removal of the bankers as trustees of the management stock and an accounting of the company's affairs since 1921 be dismissed.

# Thompson Urges That Land Law Changes Be Left to Filipinos

**Report of President Coolidge's Special Envoy Is Indefinite On Important Points and Is Not Expected to Have Effect On Possibilities of Developing Rubber in the Islands—Urges Experiment Stations.**

With respect to rubber growing in the Philippines, the report of Colonel Carmi A. Thompson, which President Coolidge forwarded to Congress on December 22, contains practically the recommendations which the public had been led to expect. The special envoy of the President, who was in the Islands from July 9 to October 4, and who devoted so much attention to the rubber land situation as to arouse the opinion in some quarters that he was merely another rubber investigator, recommends that the land laws be changed to encourage large rubber developments. He urges, however, that such changes be made by the Philippine Legislature rather than by the American Congress. The problem of independence should be postponed "for some time to come", in Col. Thompson's opinion.

Reference in the report to opening up the islands for rubber culture are as follows:

"Rubber has, perhaps, been the Philippine product uppermost in the minds of the American and the Filipino people for the past two years. The trees from which rubber is obtained grow wild in many parts of the Southern islands, but it is only during the last twenty years that efforts have been made to cultivate it.

"On the largest plantation in the Philippines, that of the American Rubber Company on the Island of Basilan, there are now growing approximately 250,000 trees of which 40,000 are eight years old and are being tapped.

### *Company is Making Profits*

"This company operates its own refining plant, which was erected at a cost of approximately $15,000 and which has sufficient capacity to refine the product of the plantation when all of the trees reach maturity. This plantation is now operating at a profit and has been doing so for some years past, which demonstrates that rubber can be produced at a profit in the Philippine Islands under present conditions.

"There are also other successful rubber developments on the Island of Basilian and in the provinces of Davao and Cotabate.

"The American Department of Commerce has reported that there are approximately 1,500,000 acres of land on the islands of Mindanao, Basilan and Jolo suitable for the production of rubber, and that in some respects this acreage is better suited for the purpose than land now producing rubber in Java, Sumatra and in Malay Peninsula.

*Col. Thompson (on left), photographed in Manila with Manuel Quezon, leader in the Philippine independence movement.*

"When rubber is raised on a very large scale in the Philippine Islands, the problem of securing an adequate supply of labor will become a matter for serious consideration. I believe, however, that for some time to come labor will enter the rubber territory from other parts of the islands as it is required, and in sufficient quantity to produce from 75,000 to 80,000 tons of crude rubber annually.

"This quantity constitutes about one-fourth of the annual requirements of the United States at the present time.

### *Small Plantings Feasible*

"While it is apparent from the experience of the American Rubber Company and of all other rubber districts in the East that rubber can be and should be raised in the Philippines by small planters, it will probably be necessary to encourage the development of a few larger estates in the beginning.

"Such estates would establish a market for small producers, aid in solving many of the technical problems which might arise in introducing rubber culture into a new area and generally create a feeling of confidence in the future of rubber production in the islands.

"If it should be found necessary to change the land laws of the Philippines to induce large interests to enter the country for the purpose of starting rubber production there, such amendments should be made by the Philippine Legislature. This body is in a position to keep within reasonable limits the amount of land held by large companies and otherwise to protect the interests of the Philippine planters who may be expected to develop small plots when the market is established."

The two following definite recommendations, based on the above observations, are included in the dozen which Col. Thompson laid before President Coolidge:

"Tenth—That the Philippine Legislature should amend the Philippine land laws (with proper safeguards) so as to bring about such conditions as will attract capital and business experience for the development of the production of rubber, coffee and other tropical products, some of which are now controlled by monopolies.

"Eleventh—That no amendments be made at this time to the Philippine land laws by the American Congress."

### *Experimental Stations Urged*

Another recommendation in which prospective rubber growers would be interested asks that the United States Department of Agriculture be enabled to establish a sufficient number of experimental stations in the Islands to properly develop the agricultural resources. Experiments in rubber culture are not specifically mentioned but it is understood that activities of the Department would logically include the planting of small acreages of rubber in districts where it has not yet been cultivated.

Editorial comment in the United States following the publication of Col. Thompson's report has been to the effect that he is too lenient with the Filipino political class. Indefinite rather than definite postponement of the independence question is recommended and the administration of Governor-General Wood is mildly criticized. The substitution of civil for military assistants is suggested.

### *To Protect Rubber Supply*

In an interview with Cleveland newspaper men, Col. Thompson spoke more strongly on the rubber possibilities of the Philippines than he did in his report to the President. Proper development, which appeared entirely economic, he said, would protect the United States from any foreign monopoly. Only 107 tons of rubber were shipped from the Philippines in 1925 but they could easily be made to supply half of the quantity needed by the United States.

It is felt in Washington that any Congressional action based on the Thompson report will be deferred since pending legislation will occupy the present short session. Congress already has before it three bills dealing with the Philippines. Two relate to fiscal affairs while the third, the Bacon Bill, would separate the southern islands from the Manila government. All of these are opposed, with qualifications, by Col. Thompson.

## SEIBERLING SALES WILL APPROXIMATE $17,000,000

F. A. Seiberling, president of the Firestone Tire & Rubber Co., Barberton, Ohio, has announced that sales of his company for 1926 will be approximately $17,000,000, against $11,729,047 in 1925. This means that the average sales gain of 45 per cent each year over a five-year period will be continued. Such a gain for 1926 is expected to be the largest made by any rubber company.

During 1922 the company's sales were $3,716,335; in 1923, $5,782,321, and in 1924, $8,274,500.

However, net earnings for 1926 will be considerably lower than in the previous year, owing to inventory losses in crude rubber. Estimates place net profits between $600,000 and $700,000, which should, be equivalent to over $2 a share on common stock, compared with a net income of $1,244,967, or $6 a share in 1925.

The Seiberling company controls the Kemitex Products Company which manufactures rubberized fabrics and rubber heels. Seiberling tires are now used as original equipment on Chrysler, Marmon, Packard, Peerless, Stearns-Knight and Willys-Knight automobiles.

### Win Tax Decision

The Goodyear Tire & Rubber Co., Akron, on Jan. 3 won an appeal in the United States Supreme Court which reversed a decision of the Court of Claims upholding the contention of the Treasury Department that the stocks of the company having $1.00 par value were taxable on their previous $100 value under the Federal excise tax act. The Supreme Court held that the stamp tax should be based on the actual value of the stock. The par value of the stock was changed in April, 1921.

### Stedman Declares Dividend

The board of directors of the Stedman Products Company, South Braintree, Mass., has declared the 33rd consecutive quarterly dividend of $1.75 per share on the preferred stock, payable January 3rd, 1927, to stockholders of record at the close of business December 24th, 1926.

### India Declares Dividend

Directors of the India Tire & Rubber Co., Akron, on Dec. 14 declared the regular dividends of 62½ cents on common stock, payable Jan. 1, 1927, to stockholders of record Dec. 20, and 1¾ per cent on preferred stock, governed by the same dates.

### N.T.D.A. Directors Meet

Directors of the National Tire Dealers' Association at a meeting in Akron late in December conferred on the subject of losses incurred by the practice of accepting old tires in partial payment for new merchandise. The conference was attended by the following directors: H. V. Eva, S. B. Harper, A. M. O'Leary, H. C. Baker, R. W. McCaughan, Herb Ruhnke, Martin Barry, Joseph Walsh, H. D. Horton, A. L. Glick and A. P. Woehrle.

## TO MANAGE GOODYEAR PLANT IN AUSTRALIA

**The gentlemen above will direct the operation of the contemplated plant of the Goodyear Tire & Rubber Co. at Sydney, Australia. They are, left to right, B. M. Morehead, construction engineer; W. G. Kither, vice-president; William Urquhart, factory manager; and Robert C. Metzler, secretary and treasurer.**

### Manhattan's Sales Increase

The Manhattan Rubber Manufacturing Co., Passaic, N. J., reports gross sales of $1,226,329 for October, compared with $1,227,478 for September and $1,078,074 for October, 1925. Sales for the first ten months of 1926 aggregated $11,516,-221, which practically equals the figure of $11,835,162 for the entire 12 months of 1925.

## EMPLOYMENT GAIN SHOWN BY FOOTWEAR FACTORIES

In a survey embracing more than 10,000 establishments, with over 3,000,000 employees, it was developed that one of the outstanding increases in labor employment during November was made by the rubber footwear industry, which increased its payrolls by 3.1 per cent. This compares with a general employment decrease of 1.2 per cent and a drop in payrolls of 3.2 per cent, according to figures given in a report just released by the Bureau of Labor Statistics.

It was stated that the most pronounced decreases in employment were largely seasonable, and it is assumed that the increase shown in footwear factories was also of a seasonable nature.

### Making Rubber Chains

The Goodyear Tire & Rubber Co., of Canada, Ltd., Montreal, is producing the rubber non-skid chains, which the Akron plant bought out last winter, at a rate of from 200 to 250 pairs a day, but officials report that orders are far ahead of current output. As a result, this is being increased as rapidly as possible.

## LAWRENCE & CO. LOSES THREE OF ITS MEMBERS

On Dec. 31 Henry S. Howe, Henry C. Everett and Henry W. Williams retired as members of the firm of Lawrence & Co., Boston and New York, leading mill representatives and representing among other companies, the New England Southern Mills, manufacturers of tire fabrics. The other members of the firm, Henry W. Howe, John S. Lawrence, Francis R. Masters and John E. Rousmaniere will continue the activities of the Lawrence & Co., which is internationally known, through its sales activities.

Lawrence & Co. was founded on Jan. 1, 1863, taking over the business of Mason & Lawrence, organized 20 years before. Mr. Howe had been a member of the firm for 40 years, and Mr. Everett was a nephew of Henry B. Mather who became a partner in 1859. Mr. Williams, who joined Lawrence & Co. in 1882, was admitted as a partner in 1906.

## GOODYEAR FINISHES ITS ONE HUNDREDTH AIRSHIP

The Goodyear Tire & Rubber Co., Akron, recently completed its 100th airship, a training dirigible which will be used by the U.S. Army Air Corps. The company has been engaged in aeronautical construction work more than 12 years, and nearly all of the 100 aircraft designed and built at the Akron plant have been for either the army or navy air forces. Nine of the original balloon department employees also worked on the construction of the latest ship.

### Lawson Plant Destroyed

Fire of unknown origin recently destroyed the factory of the Lawson Rubber & Manufacturing Co., Dallas, Texas, manufacturers of tire boots and tire accessories. Loss was estimated at $100,000.

# British are Inclined to Favor Formation of Buying Syndicate

**Mincing Lane not only Sees No Danger to its Best Interests in the Operation of the Purchasing Syndicate, but is Inclined to the Belief that its Ultimate Effect will be Salutary.**

British rubber brokers and other interests concerned in the trend of crude rubber prices have now had ample time to consider the American purchasing pool and its possible effects on the situation. Although, as is to be expected, the opinions of various British crude rubber executives differ, some looking with favor upon the pool, while others tinge a half-hearted welcome to the news with exceptions, it appears the general concensus that Mincing Lane has nothing to fear in the operations of the purchasing organization, as it will tend to stabilize the market.

Almost all the British rubber men who have thus far expressed opinions, admitted that at first consideration they were inclined to consider the pool as inimical to their best interests, but on later reflection confessed that the reverse would undoubtedly prove to be the case, as the pool represented what appeared to be an honest effort to work in with the producers to achieve stability of prices and avoid the inventory losses that are sure to result from any wide fluctuation in prices.

Sanderson & Co. in a statement issued to the London press stated that inasmuch as "the authors of the combine have taken the general public into their confidence so long after its formation, it is a clear indication that they desire the help of the public to maintain prices....While a combine of this kind has large power both for good and evil, we come to the conclusion that the advantages to the trade generally outweigh the disadvantages, and we look upon it as a bull point. The rubber trade has never enjoyed a superabundance of capital, and an arrangement which adds £6,000,000 to £8,000,000 to the carrying capacity of the consumers must eventually be a help to all concerned in the industry, although the sum in itself is not sufficient to dictate prices."

### *An Aid to Stevenson Plan*

J. G. Hay of Guthrie & Co., Ltd., sees the pool as an aid to the Stevenson plan: "Since its avowed object is the stabilization of price, the combine should not be regarded as antagonistic to producers' interests. In the opinion of the consumer the Stevenson scheme has not shown the degree of flexibility necessary to meet the rapidly changing conditions of supply and demand. Although the scheme has been recently modified, sufficient time has not elapsed in which to demonstrate the success of such modifications. Accordingly, a liquid pool of stocks which can be withheld at will might be made to serve as a necessary complement to the

*This cartoon in the New York Tribune entitled "Tapping the American Rubber Tree" is typical of the way American newspapers greeted the rubber purchasing combine.*

Restriction Scheme, and it is perhaps to be regretted that the producers themselves did not undertake this function and so provide protection against its possible abuse. It is to be hoped, however, that the skill, judgment and restraint which will characterize the combine's operations will be such as will serve to confirm the favorable and friendly view formed at its inception."

Geo. White & Co. does not think that the pool will have any immediate effect on the market one way or another: "It is believed that the combine has already accumulated a fair proportion of their requirements, and that for the present it will not have any material influence on prices."

Lewis and Peat, however, believes that the effect of the pool's operations has already been felt in reaction of the market to the announcement of its formation. "The report in the press," they said, "... had the effect of causing a sharp upward movement. This, however, was short-lived when it was realized that this was rather a bear than a bull point. It is probable that most of the buying has already been effected, and it is doubtful if the rubber will reach consumption for some considerable time, but is more likely to remain as a reserve against contingencies."

In a brief statement, S. Figgis & Co. expressed its belief that the formation of the pool will tend to steady the market.

Lloyd Matheson and Carritt are inclined to doubt the ultimate effect of the pool, and although hesitating to directly condemn it, do not leave readers in doubt about the connotation carried in their statement: "Obviously, American rubber interests do not consider London and New York stocks sufficiently high to have a stabilizing effect on prices, despite all we have heard about the way they have been increasing. In view of the fact that the two combined do not amount to ten weeks' supply, we can well believe it, more particularly as monthly supplies will be reduced to less than monthly requirements within a few weeks, unless prices rise materially.

"We have always maintained that any news emanating from America should be regarded with suspicion. We can scarcely believe that America would inform the world in advance that she was about to buy 40,000 tons of rubber. The heavy purchases made during the early part of November, which sustained prices around 1 shilling 8 ½ pence for about a fortnight, were probably made on behalf of the pool."

### *A Grower's Opinion*

It is likely that W. Arthur Addinsell, chairman of the Bukit Kajang Rubber Estates, Ltd., expressed the opinion of many rubber growers when he said "... I am inclined to the opinion that the American move, if it is serious and honest, should be welcomed, because, I think, the past year has taught us that the world's consuming power has not yet developed sufficiently to allow of an unrestricted output being comfortably absorbed...It is perhaps difficult to envisage a group of American business men playing the part of philanthropists; but I am quite sure the average American user of rubber has a soft place in his heart for the producer, if only because without the producer, he would be unable to carry on his business. What he fears most, I think is the market operator, who is always looking for the opportunity to ride on the back of either the producer or the consumer.

"...One danger I can visualize in the pool is that in course of time the operation of restriction will affect reductions in the surplus stock to the extent that the pool holds sufficient rubber to force the price up for those factories who are outside the pool. That is, of course, a domestic matter for the consuming side of the industry, but it obviously would not tend to stabilization, which word is prominently used in the particulars of the combinations which so far have been made public."

## Open New Sales Office

The General Belting & Supply Co., Inc., which was organized this spring by R. D. MacPhail and associates to handle rubber, balata and leather belts, has opened a sales office at 2817 Norton Ave., Everett, Wash. The company is sales agent for the Mechanical Rubber Company, Cleveland, a subsidiary of the United States Rubber Company.

## GAIN OF 36 P.C. SHOWN IN CANADIAN OUTPUT

**Rubber Goods Manufactured in Canada During 1925 were Valued at $78,229,574, Against $57,411,446 in 1924, According to Figures Just Released—Tires 53.8 P.C.**

According to an announcement of the Department of Commerce issued late in December, Canada increased her production of rubber goods in 1925 by more than a third, which meant not only an increase in home consumption, but a heavy gain in exports. Canadian exports of rubber goods were reported as equal to 34 per cent of similar exports from the United States.

The gross value of production of the entire Canadian rubber industry in 1925 was $78,229,574, compared with $57,411,446 in 1924, an increase of 36 per cent. Of the three main classes of products, tires accounted for $42,105,239, or 53.8 per cent of the total; rubber footwear accounted for $24,657,505, or 31.8 per cent; and other rubber goods, $11,266,830, or 14.4 per cent. Strong gains were made in the production of all the principal items with the sole exception of rubber belting. The outstanding increases over 1924 were in automotive-rubber products, which as a group increased 48.8 per cent. The production of automobile inner tubes showed the largest gain, 60.3 per cent.

***U. S. and Canada Compared***

The total value of Canadian rubber manufactures for 1925 represented only six per cent of the value of United States production in the same period. However, Canada exported 22 per cent of her production, while the United States shipped only four per cent out of the country. Total Canadian exports were valued at 34 per cent of the value of American exports.

Canadian products are largely dependent upon export trade for a market—especially for tires and canvas rubber-soled shoes. A large part of these exports are produced in Canadian branch factories of American companies. Sixty-seven per cent of Canadian total rubber exports went to British dominions and dependencies. The United Kingdom ranked first as an export market, taking a total value of $3,865,059, closely followed by New Zealand with $3,133,570. The other outstanding markets were Argentina, $1,587,448; British South Africa, $1,133,718; and Australia, $719,722.

## MINDORSA TO PLANT RUBBER ON MINDANAO

The Mindorsa Rubber Plantation Company, a New Jersey corporation, has asked for a license to do business in the Philippines, according to a cable from Manila. The company, which is the first foreign corporation to take such action, plans to plant 2,000 acres on the island of Mindanao. The Mindorsa Company was formed as the result of an extended visit to the Philippine Islands in 1924 by J. F. Corsey, its president.

### Open New Firestone Branch

The Firestone Tire & Rubber Co. recently opened a new branch at Springfield, Mass., in charge of George M. Powell, who has been with the company for nine years. The branch will be the headquarters for the territory included in the four western counties of Massachusetts, the southern part of Vermont and part of New Hampshire.

## H. S. FIRESTONE, JR. ON WAY TO AMERICA

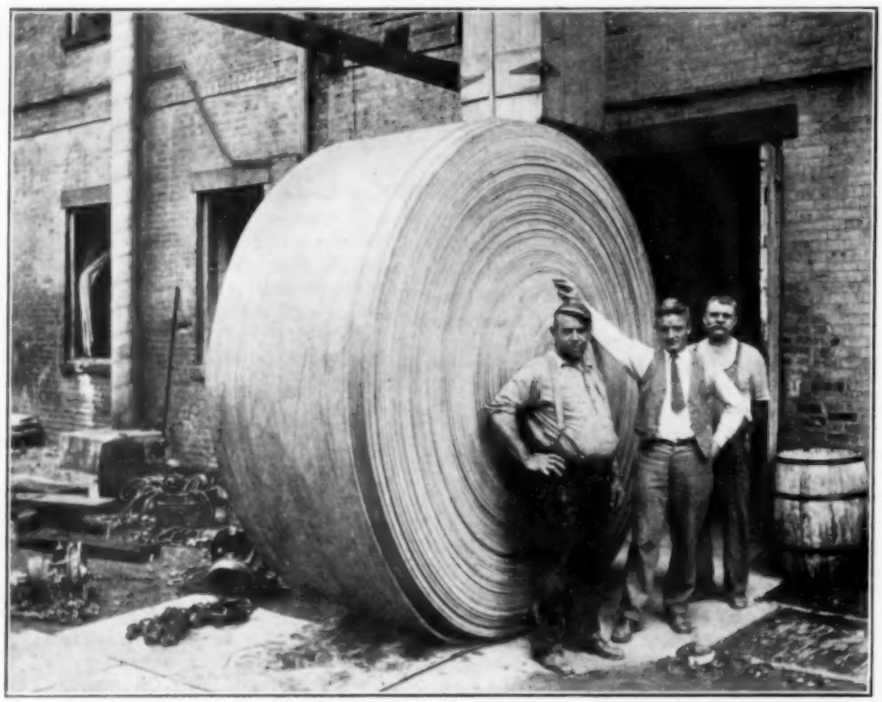
Harvey S. Firestone, Jr., with Mrs. Firestone, arrived in Paris December 26 after a three months' visit to the Firestone plantations in Liberia where he found conditions very favorable. During his stay in the negro republic, Mr. Firestone chartered a steamship and cruised 400 miles along the coast from Monrovia to Palmas, studying the possibilities from a plantation standpoint of many sections other than 1,000,000-acre tract which has been leased from the Liberian government.

Mr. Firestone, Jr., said that a study of conditions had convinced him that the Liberian plantation development would have a successful outcome. "We have had no difficulty in securing sufficient labor," he said. "The Liberian government is fully alive to the opportunity the economic development offers to the country and is cordial and helpful. An independent scientific investigation of health conditions in the country was recently completed by the Harvard University African Expedition headed by Richard D. Spring of the Harvard School of Tropical Medicine."

Mr. and Mrs. Firestone remained in Paris until January 5 and then embarked on the liner *Paris* for New York.

### American Insures Employees

The American Rubber & Tire Co., Akron, has taken out group insurance for all its employees. All except foremen, salesmen and executives have been insured for $2,000 each, with a $5,000 policy for the others. Included in the plan is the service of trained nurses who will visit the homes of all sick employees.



### Tucker Manufactures 1000-Foot Conveyor Belt

**The Tucker Rubber Corporation, Buffalo, N. Y., with which is affiliated the New York Rubber Company, Inc., recently manufactured at its Beacon, N. Y., factory a 1000-foot conveyor belt. The belt weighed more than seven tons and when rolled stood approximately nine feet in height. It has been put into operation at the yards of a large sand and gravel company where it runs at a speed of 300 feet a minute and carries 600 cubic yards of material an hour. In addition to conveyor, transmission and elevator belting, the Tucker corporation also manufactures air, steam, water and suction hose, dredging sleeves, sheet and hydraulic packings, matting, molded goods and rubber flooring in imitation of marble.**

## TIME LIMIT EXTENDED ON TRADING NOTICES

Walter Dutton, secretary of the Rubber Exchange of New York, Inc., on Dec. 27 announced a new rule providing that trading in the current month shall stop at noon on the last trading day upon which transferable notices may be issued for delivery.

"Transferable notices may be issued up to 12:15 p.m. on the last trading day," Secretary Dutton's notice read. "This extension of time applies to notices issued against open position, and also provides for issuing notices against sales made on the last day of that month. In the latter instance, clearing members may issue transferable notices for such deliveries before 12:15 p.m. on the last trading day of that month, which notices should be issued direct to the member clearing the purchase instead of to the Clearing House.

"Such transferable notices must be passed on within a half hour and circulate until the interest in such month is liquidated, but not later than 8 p.m. on the date of issue."

## MACHINERY EXCHANGE TO BUILD WAREHOUSE

The United Rubber Machinery Exchange, now located at 311 Mt. Pleasant Ave., Newark, N. J., has purchased a plot of ground, 100 by 450 feet at 317-323 Frelinghuysen Ave., Newark, with sidings on the Lehigh Valley Railroad. The company plans to build a large office and warehouse with all modern improvements, cranes and equipment for the handling of rubber machinery.

The new property is an ideal location, as it is situated on the Lincoln Highway in the center of Newark and is accessible to all railroads. The company expects to be in its new premises by the spring.

Officers of the United Rubber Machinery Exchange are Sigmund Liebstein, president and treasurer, and Milton J. Liebstein, secretary.

### *P. B. Bosworth*

P. B. Bosworth, aged 66, designer for the Miller Rubber Company, and the inventor of more than 250 devices used in various industries, of which probably the best known is the Firestone rim, died suddenly Dec. 14 in his offices in the Miller plant. Death followed an attack of acute indigestion.

Mr. Bosworth for the last 30 years had been in the employment of nearly every rubber company in Akron. He was born in Bridgeport, Conn., and attended the Cooper-Union Institute, New York City, where he completed his technical education. Going to Akron in 1898 as an employee of the Akron Electric Works, he later became associated with the B. F. Goodrich Company and the Goodyear Tire & Rubber Co. He began work with the Firestone Tire & Rubber Co. in the original factory and while there designed the Firestone rim, the object of much litigation between rubber companies.

Retaining the foreign rights on the Firestone rim, Mr. Bosworth formed a company in London for its manufacture, which was liquidated after a year. On his return to America, the inventor joined the Victor Rubber Products Company, Springfield, Ohio, where he spent ten years. Two years ago he went to the Miller Rubber Company as designer.

Mr. Bosworth is survived by a widow, Mrs. Mary Anderson Bosworth; a son, James W.; a daughter, Mrs. Benjamin Tinker; and two grandchildren. A sister, Mrs. Andrew Burch, also survives him.

## EXPERIMENTING WITH RUBBER IN CUBA

Experiments in rubber culture are under way in Cuba through the cooperation of representatives of the United States Department of Agriculture and the W. L. Schurz, the recently-appointed economic advisor to the Cuban government. Dr. Shurz was in charge of the rubber investigating party of the Department of Commerce which visited the Amazon Valley and made a voluminous report of their findings. His appointment to his present position was announced in THE RUBBER AGE a few weeks ago and the prediction that rubber experiments in Cuba would be undertaken has already come true.

A quantity of rubber seeds brought from the Caribbean by an expert of the Department of Agriculture have been planted in the experimental gardens of the Cuban Government at Santiago de las Vegas, near Havana. The seedlings will be distributed to sugar planters and other farmers throughout the island so that the feasibility of rubber growing in various districts will be proven.

Seven Hevea trees of twenty years of age have been growing at Santiago de las Vegas but their growth has not come up to that expected on plantations in the East. These trees were severely injured in a hurricane which swept over Cuba recently, as were a number of Castilloa trees growing nearby. An effort will be made to find suitable areas outside the hurricane zone.

Cuba has a distinct dry season which corresponds with the winter. Tapping experiments on the seven Heveas have shown the yields to decline during this period. Labor costs are also high. The factors expected to offset these advantages are the unusually fertile soil and the nearness to the United States, the principal consuming market.

*A Castilloa tree growing near Guantanamo, Cuba. There are many such specimens throughout the island.*

## WISHNICK-TUMPEER, INC. ISSUES PRICE BULLETIN

Wishnick-Tumpeer, Inc., 251 Front St., New York, direct factors for imported and domestic pigments and chemicals, in conformance with the growing tendency of chemical houses selling largely to the rubber factories, have issued the first number of a chemical price bulletin. The company maintains a technical service department, including a complete rubber experimental plant and a chemical laboratory. Deliveries can be made from New York, Cleveland, Chicago and other distributing points.

## SIEMON MERGES WITH WATERTOWN COMPANY

By acquiring a controlling interest in the Watertown Manufacturing Company, the Siemon Company, Bridgeport, Conn., becomes the largest manufacturer of molded insulation in the world, representing an $8,000,000 organization.

The Siemon Company, which was founded in 1903 as the Siemon Hard Rubber Company, acquired the Specialty Insulation Manufacturing Company, Hoosick Falls, in 1906 and two years later took over the Colasta Company, also of Hoosick Falls. In 1922 the Siemon Company purchased control of the Furnaoid Company, Newark, N. J.

### To Bid on New Airships

William Young, in charge of the aeronautical department of the Goodyear Tire & Rubber Co., upon his return to the factory from Washington, said that his company was preparing bids for two new airships for the navy. Building of the ships has been authorized but the funds have not yet been appropriated by Congress. The aircraft are to be three times larger than the Los Angeles. He said that the Goodyear company could start work immediately after the contract was granted.

## BALLOON TIRE USAGE IS GROWING STEADILY

**Statistics of both Rubber Association and Tire & Rim Association Show Balloons are Coming into General Use, Comprising Almost 50 P.C. of Equipment.**

A study of the reports issued monthly by both the Rubber Association of America and the Tire & Rim Association shows plainly that during the year 1926 the use of low pressure tires grew steadily. It will not be many years before the high pressure tire is relegated to the same place the fabric tire held in comparison with the cord before the latter began to be superseded by the third great improvement in pneumatic casing construction—the low pressure tire. If the figures of the associations mentioned are any index, this trend is well on its way.

Compared with a total production of 4,428,074 balloon tires in 1924 and 15,567,644 in 1925, the total number of tires of this type manufactured by member companies of the Rubber Association in the first ten months of 1926 was 18,925,473. Presuming that production of balloons during the last two months of the year will aggregate about 3,000,000, which is a very conservative estimate as final figures will undoubtedly show, total 1926 production will be more than 21,900,000, a gain of at least 6,000,000, or 40 per cent, over the previous year.

***Production of Balloon Rims Gains***

Taking the statistics of the Tire & Rim Association as a basis of comparison, it will be seen that for the first eleven months of 1926 the production of low pressure rims amounted to 79.1 per cent of the total rim output, comparing with 63.3 per cent in 1925, a gain of 15.8 per cent.

The discrepancy existing between the percentage of gain in figures of the Rubber Association and the Tire & Rim Association is not as great as on first sight, because the percentages of the latter association are based on the relation of balloon tire rims to the entire production of all types of rims, whereas those of the Rubber Association are concerned with balloon tires only and no attempt has been made to compute the percentage relation of balloon production to the output of all types of casings. And while only a small part of the tires manufactured by members of the Rubber Association are shipped directly to the automobile factories, almost all the rims manufactured are for original equipment.

Yet, taking either set of figures for study, it will be perceived that the production rate of balloon tires points to the fact that close to half of the tires in use in this country are of the low pressure variety. Cars manufactured five and six years ago are gradually being scrapped and with a continuance of the present rate of gain in balloon tire popularity, casings of this type will surely be used on more than 75 per cent of the automobiles within a few years.

According to the Rubber Association, October production of balloon tires totaled 1,755,646, and low pressure tubes, 1,786,536. Production of all types of tires in October was 3,871,263, compared with 4,322,167 in the previous month. Inner tube production totaled 4,655,969 units, against 5,692,812 in September. October shipments of all tires were 3,452,754, against 4,584,811 in the preceding month. Inventories showed 7,593,908 tires on hand at the end of October, compared with 7,153,559 in September.

### R. E. Winch Joins Republic

R. E. Winch, who for the past nine years has been manager of a similar department of the B. F. Goodrich Company at Akron, has been made production manager of the belting, packing and matting departments of the Republic Rubber Corporation, Youngstown, Ohio. Mr. Winch has had considerable experience not only in the manufacture of belting, but in the field supervising installations.

R. E. Winch who has joined the Republic Rubber Corp.

He will succeed M. W. Clark, who has been with the Republic corporation for twelve years, the last nine of which he spent in charge of the production of belting, packing and matting. Mr. Clark has gone to the sales department as a special factory representative on belting.

## BATAVIA MILLS, INC. LOWEST COAT BIDDER

Batavia Mills, Inc., New York, was the lowest of four bidders on 4,200 rubber coats for the United States Marine Corps for Philadelphia delivery. Its bid was $4.07 each, net, with delivery to start 24 hours after receipt of the contract and to be completed in 60 days. Other bidders were C. Kenyon Company, Inc., Brooklyn, N. Y., $4.38 each, net; United States Rubber Company, New York, $4.81, net; A. S. Goldberg, Philadelphia, on three samples, respectively, $5.35; $5.90 and $6.15 each, net.

### Goodrich Workers Dance

Employees of the B. F. Goodrich Company held an entertainment and dance at the Akron armory on New Year's Eve, which was arranged under the auspices of the company's police and fire departments.

## BELTING PROBLEMS ARE STUDIED AT CONVENTION

Several sessions of the annual convention of the American Petroleum Institute, held at Tulsa, Oklahoma, in December, were devoted to consideration of belting problems, including rubber belting. Specifications for drilling and pumping belts were considered and it was decided that such specifications should be kept on a "tentative" basis pending further investigations by the manufacturers and the Institute.

An interesting paper on "The Care and Use of Belting in the Oil Industry" was read by D. L. Trax of the Gypsy Oil Company. The rubber belting fraternity are pleased to note that the Institute and the oil companies individually are taking an interest in this subject since belting is subjected to more abuse and misuse in the oil fields than in any other line of work.

Mr. Trax developed the point that with deeper drilling and heavier loads, the 10-inch belt which was considered standard is rapidly going out of use and wider belts are becoming more common. He said that experience had proven that a wide, thin belt will give longer and better service than a thick, narrow belt due to the fact that the wide belt offers a greater area of contact on pulleys, thus preventing slippage, while the thinness decreases the internal friction of the belt in bending around pulleys.

## UNITED & GLOBE PLANT SALE AGAIN IN COURT

Abraham Jelin and United States Marshal Frederick C. Schneider, of Trenton, have been directed by Federal Judge Runyon at Newark to show cause why they should not pay the balance due on the sale of the factory of the United & Globe Rubber Corp., Trenton, N. J., which was sold April 27 for $118,500.

According to the attorneys for J. Philip Byrd and Edward C. Rose, receivers for the United & Globe corporation, the sale was made to Benjamin Small, who paid $25,000 April 28 and afterward assigned his interest to Messrs. Jelin and Schneider. Two further payments of $25,000 were made on Aug. 26 and Aug. 31, leaving a balance due of $43,500.

### Alfred Hale to Build

The Alfred Hale Rubber Company, 2 Linden St., Quincy, Mass., has let a contract for the construction of a one-story addition adjacent to its present factory. The new building will cost $45,000, with equipment.

### To Operate Testing Bus

The Miller Rubber Company, Akron, has purchased a Mack six-cylinder bus chassis for tire testing purposes. It is planned to drive this bus 400 miles in 24 hours for each test in order that the tires will undergo as severe usage as possible.

## NO AGREEMENT REACHED ON GERMAN TIRE PRICES

Even after weeks of futile negotiation, German and American manufacturers selling tires in Germany have been unable to come to an agreement on prices. It had been thought that both groups would agree to identical quotations and refrain from under-cutting one another.

An agreement has been signed, nevertheless, between American manufacturers and German dealers to the effect that tires will be sold only to firms registered as members of the dealers' union. In other words, American manufacturers have agreed to sell to no outside middlemen in Germany. It is stipulated in the agreement that discounts to dealers are not to exceed 10 per cent, with three per cent for cash. Bonuses, which up to the present time have rarely exceeded 10 per cent, are to be paid only at the end of the business year.

According to the American Trade Commissioner at Berlin the principal obstacle to an agreement between the German and American manufacturers was insistence on the part of the former for the inclusion of kilometer guarantee. A motion was passed to elect a committee to study the question and see whether some sort of an agreement could be reached in the future. Representatives of the Michelin, Continental and Dunlop companies, in addition to strictly American manufacturers, are included in the committee. The appointment of this committee excludes the possibility of a price and rebate war.

## LEADER IN SYNTHETIC RUBBER RESEARCH DEAD

Sir William Augustus Tilden, whose work on specific heats of metals won world-wide recognition among chemists, died at Northwood, England, recently. As a scientific investigator, Sir William was known for his work on the constitution of the terpenes. He was the first, in 1874, to prepare nitroso-chloride of pinene (the chief constituent of turpentine), and, by showing how turpentine can be polymerized into isoprene, which in turn can be converted into caoutchouc, he proved, at least, the theoretical possibility of the synthetic manufacture of rubber.

### Visit Hartford Plant

More than 450 members of the Hartford Foreman's Club held their regular December meeting at the Hartford Rubber Works, Hartford, Conn., a subsidiary of the United States Rubber Company. Charles B. Whittelsey, president, was host and a dinner was served in the factory.

In a short address Mr. Whittelsey recalled the founding of the plant in 1881 when the first tire, a solid seven-eighths-in. bicycle tire was made. The next development was a hollow tire, intended to be filled with water. In turn this was abandoned for the pneumatic bicycle tire.

Mr. Whittelsey said that few persons realized that a prominent Hartford man, Charles Rice, manager of the Underwood plant, was the first to suggest fabric tires. The first clincher tire was also made at the Hartford plant, he said, and also the first famous Dunlop, or straight-side tire.

Before the foremen were conducted through the factory, H. R. Gilson of the New York office, a technical assistant and consulting engineer for the United States Rubber Company, gave a lecture on the history of rubber.

## GOODYEAR COTTON OF CANADA MAKES REPORT

Profits of $49,657 for the period from April 1 to Sept. 30, 1926, are reported by the Goodyear Cotton Company of Canada, Ltd., after provision for bond interest and income taxes. After payment of preferred dividends this leaves a surplus of $33,032. A reserve of $245,591 has been set up for depreciation.

### Brazilian Rubber Farm

The state of Amazonas, Brazil, has purchased a large tract of land on the Amazon River, near Manaos, and will devote a part of it to an experimental rubber farm. Among the chief subjects to be studied, according to the American Consul stationed at Manaos, are selection of varities, most economical methods of extracting latex and rubber tree diseases. The farm will also furnish seeds and seedlings to farmers and agricultural associations. Little government assistance has previously been given to Hevea planting in Brazil.

### Clearing House Elects

The Rubber Exchange Clearing House, New York, re-elected all officers on Dec. 1. These officers are Leopold S. Bache, president; Frederick W. Dunbar, vice-president; Theodore B. Carver, secretary and treasurer; and Edward B. Thompson, assistant treasurer. All members of the board of directors were re-elected with the exception of W. Allison Flagg, who was succeeded by F. B. Peterson.

## TO OPEN RECLAIMING PLANT IN CALIFORNIA

The Rubber Products Company of America, organized during the early summer of 1925 to manufacture reclaimed rubber, plans to begin production at its plant at Bay City, near Los Angeles, Cal., within the next month. According to W. H. Yetman, president, the factory was erected at a cost of $350,000 and is 225 by 65 feet in dimensions, of concrete and steel construction, one story in height. It is located on a spur of the Sante Fe Harbor line railroad.

Eighty men, exclusive of foremen and executives, will be employed at the start to reclaim rubber by a process perfected by C. F. Willard. It is estimated that the factory will consume 9,000 tons of scrap rubber the first year, Mr. Yetman said.

## SUE G. & J. FOR TIRE PATCH INFRINGEMENT

Joseph G. Moomy, one of the partners in the Keystone Rubber Mfg. Company, Erie, Pa., has entered suit against the United States Rubber Company and its subsidiary, the G. & J. Tire Company, Indianapolis, Ind., for the alleged infringement of a patent on a tire patch. The case is being heard before Judge Robert C. Baltzell in Federal Court at Indianapolis.

Mr. Moomy charges that he has been manufacturing a tire patching outfit, which the defendant company has been infringing for the last six years. The G. & J. company asserts its patch is not an infringement, as it resembles all other patches of its type as well as the Moomy patch.

### Declare Two Dividends

Directors of the Goodyear Tire & Rubber Co. have declared two dividends on the preferred and prior preferred stocks. A dividend of $1.75 on the preferred is payable Jan. 1 to stockholders of record Dec. 1, and one of $2.00 on the prior preferred is payable on the same date to stockholders of record Dec. 15.

## First Tank To Be Mounted on Pneumatic Tires

**The British Army has recently adopted a new model one-man tank which is mounted on pneumatic tires. It is said that this is the first time pneumatic tires have been used for such a purpose. The tank is built so that it can travel on the tires or on a track laying apparatus. The latter would be used in difficult places or when the tires had been punctured.**

# *Cotton and Tire Fabrics.*

## FABRIC MILL PASSES PREFERRED DIVIDEND

Because it has recently suffered particularly severe competition and has been forced to curtail operations the West Boylston Mfg. Company, Easthampton, Mass., has passed the quarterly dividend on its preferred stock, due Dec. 1. The company manufactures tire fabrics and yarns, and certain specialty cloths.

Present capitalization consists of $2,499,600 preferred stock and $5,000,000 common, the preferred issue having been reduced from $3,000,000 by operations of a sinking fund. Dividends were paid on the preferred from March, 1923, to Sept. 1, 1926, the last disbursement, at a rate of $8 per annum. On the common stock no dividends have been paid since 1920.

The company is one of the oldest manufacturers of tire fabrics in Massachusetts and was organized in 1914. The mill is equipped with 137,500 spindles, 1,200 looms and machinery for producing special cloths for various industries.

In the fiscal year ended June 30, 1926, the West Boylston company earned a moderate operating profit, which was almost sufficient to cover retirement of $118,800 preferred stock under provision of the sinking fund. Surplus was reduced to $44,119 from $260,115, a decline of $215,996, and unearned preferred dividends of approximately $205,000 were paid.

During the current half, however, there have been no profits, due both to readjustment of inventory and a decline in the volume of business.

## SALE OF SALMON FALLS FABRIC MILLS DELAYED

The sale of the Salmon Falls Mfg. Company, Salmon Falls, N. H., which the stockholders on Oct. 21 voted to liquidate after more than a century of tire fabric manufacturing operations, has been delayed by the troublesome problem of municipal taxation.

Since the directors were authorized to dispose of the property eleven prospective bidders have inspected the holdings, of which number at least six are prepared to submit bids if they can be assured that local assessments will not be prohibitive. A high tax rate, it is said, would make it impossible to operate the mills at a profit, despite the water power facilities.

By the time this is read, all orders taken by the management will have been filled and the task of putting the machinery in order for a protracted period of idleness will have been started. Approximately 450 hands will have been thrown out of employment.

R. T. Lyma, treasurer of the Salmon Falls Mfg. Company, said that as yet no bona fide offer had been received. As soon as a definite bid is made, a meeting of directors will be called to consider it.

The feeling is general among those who inspected the mills that if they should make the purchase for approximately $500,000, the tax authorities would boost the assessed valuation to $1,000,000 through consideration of the sale as "forced."

### Fire Hose Specification

An effort is being made under the auspices of the American Engineering Standards Committee to co-ordinate the more prominent specifications for cotton rubber-lined fire hose. Those issued by the Underwriters' Laboratories, the Associated Factory Mutual Laboratories, the American Society for Testing Materials, the American Railway Association and the Federal Specifications Board are being studied with a view to adopting a so-called "American Standard" specification. It is expected that the work will be completed within the next six months.

## GINNINGS REPORTED AS 15,542,249 BALES

**Report Indicates that Over 3,000,000 Bales of Estimated Crop of 18,618,000 Bales Remained to be Ginned on Dec. 13—Gain over Dec. is only 897,283 Bales.**

According to the report of the Census Bureau issued Dec. 20, showing cotton ginnings to Dec. 13 amounting to 15,542,249 bales, over 3,000,000 bales of the estimated crop of 18,618,000 bales remained to be ginned. That the height of the ginning season had passed was indicated by the report which showed that only 897,283 bales had been ginned in the period from Dec. 1 to 13, or a little more than half of the quantity of cotton ginned during the previous two weeks.

It seems very likely that final ginnings will fall far short of the estimated crop, as it is not conceivable that ginnings for the remaining six weeks of the normal season will increase, and even though they should be maintained at their present rate, final ginnings would fall 500,000 bales below the estimated crop.

In spite of the record size of the crop, ginnings to Dec. 13 were only 710,403 bales larger than those for the same period of last year, although 2,749,955 bales over 1924 ginnings for that period. Ginnings in all States except Alabama, Arizona, California, Georgia and Texas showed decreases when compared with last year, and only in Texas, Georgia and Alabama were appreciable gains reported.

The picking of cotton has been virtually at a standstill for more than ten days, due to bad weather in the western and central belt, aided by the disinclination to work during the holidays. The next ginning report, to be issued Jan. 24 showing ginnings up to Jan. 16, may reveal a small total, say perhaps 15,800,000 bales ginned to the date. The final ginning report will be issued on March 20.

Various estimates of final ginnings place the total from 500,000 to 1,000,000 below the forecast of 18,618,000 bales.

CATALPO!

SULPHUR
FOR THE RUBBER TRADE

"TIRE" BRAND SUPERFINE
Rubber Sulphur
"TUBE" BRAND VELVET
Rubber Sulphur

*Specify "Tire" and "Tube" Brands on your orders. This will assure you of Stauffer quality and service.*

Stauffer Chemical Co.,
Houston Texas
San Francisco, Cal. Chauncey, N. Y.

By loyal, careful co-operation for many years with rubber manufacturers all over the American Continent and abroad, The Stamford Rubber Supply Company have acquired the art (and art it truly is) of producing just what suits the varying requirements of the rubber manufacturers for the infinite variety of uses of Factice in rubber, most uniformly and most economically.

*Extract from "The Advantages of Factice in Rubber Compounding".*

RUBBER FACTICE
OF
HIGHEST QUALITY
THE STAMFORD FACTICE
STAMFORD
CONN
THE STAMFORD RUBBER SUPPLY CO

# Financial Items

# Rubber and Motors

## AJAX OFFICIAL SAYS NO MERGER IS PLANNED

**Unexplained Strength of Common Stock Again Creates Reports of Merger with a Motor Company, but these are Denied—Ajax Offers 200,000 Additional Shares.**

The recent unexplained strength in the common stock of the Ajax Rubber Company, New York, has again led to reports that control of the company was passing into the hands of one of the motor companies, and in this connection both General Motors and the Nash Motor Company were mentioned. Although officials of the Ajax company subsequently denied that any such merger was contemplated, the strength in the stock has persisted to the mystification of even those close to the company.

L. T. Vance, vice-president of the Ajax company, said that he could see no reason for the rise in the stock from 7 to 12 a few weeks ago. Denying the rumors, he said that although the company has supplied General Motors for years, no new contracts had been signed. The Ajax company manufactures standard tires for Cadillac, Buick, Pontiac and Oakland cars, all products of General Motors.

*No Advantage in Merger*

It was pointed out that the motor companies have been buying tires for original equipment at prices so low that no advantage would be derived from operating their own plants. It has long been a general practice in the tire industry to sell automobile manufacturers their original tire equipment at a cost that yields only a small profit. In other words, few of the tire companies supplying automobile factories have attempted to make sizeable profits on these sales, but accept such business because it helps to keep factory operations at a high level and thereby increases the margin of profit on other tires sold through regular channels. The tire companies also receive much benefit from the advertising of tires used on motor cars as original equipment.

The Ajax Rubber Company ranks as one of the foremost smaller tire companies, with annual sales running in the neighborhood of $20,000,000, compared with upwards of $100,000,000 volume done annually by the largest companies, Goodyear, Goodrich, Firestone and United States. The company was able to make a slightly better showing in the first half of 1926 than in the corresponding period of 1925, despite the falling crude rubber market. Its sales for the six months ended June 30, 1926, of almost $11,000,000, compared with $9,696,000 in the first half of 1925. Net income for the first half of 1926 was $324,279, or 64 cents a share on the 500,000 shares of no par common stock outstanding, compared with $262,394, or 53 cents a share earned in the first six months of the preceding year.

The stock of the Ajax company reacted slightly when an additional offering of 200,000 shares of common stock to be subscribed for at $10 a share was announced. Stockholders of record Jan. 5 have the right to subscribe, at a ratio probably on the basis of one new share for each two and a half shares now held. Officials declined to reveal the exact use to which these additional funds will be put, making the simple statement that they were for working capital.

The Ajax Rubber Company is expected to report earnings for last half of 1926 which are at least as good as those in the first half, with excellent prospects that an even better showing will be made. The company has a bright outlook for 1927, as it has no long forward commitments of crude rubber and its products are meeting with good demand.

### Growers Pay Big Dividends

The Malaya Rubber Planters Corporation, with a profit for the fiscal year of £46,987, has declared a final dividend of 40 per cent. The Yam Seng Rubber Company has announced a second interim payment of 15 per cent, bring the total to 30 per cent to date. The Holy Rood Rubber Company has declared an interim dividend of 12½ per cent, and the Tanan Data Rubber Company, an interim payment of 10 per cent.

### Late Stock Prices

| | Last Price | | 1926 | |
|---|---|---|---|---|
| | Jan. 3 | Dec. 15 | High | Low |
| Ajax | 9⅝ | 7⅞ | 16 | 7½ |
| Faultless | — | 41½ | 43½ | 34 |
| Firestone | 116½ | 115 | 125 | 100 |
| do 6% pfd. | 102½ | 102 | 103½ | 90 |
| do 7% pfd. | 98½ | 98 | 100 | 96½ |
| Fisk | 16½ | — | 26¼ | 14 |
| do 1st pfd. | 76 | 79½ | 84¼ | 76⅞ |
| General | 150 | 150 | 375 | 110 |
| do pfd. | 101½ | 110 | 110 | 106 |
| Goodrich | 42¾ | 43 | 70¾ | 39 |
| do pfd. | 94 | 95 | 100 | 95 |
| Goodyear Com | 30½ | 26½ | 40 | 26½ |
| do pr. pfd. | 104 | 106¼ | 108⅝ | 105⅞ |
| do pfd. | 99¼ | 96½ | 109¾ | 96½ |
| Hood | 47 | 47⅝ | 68¾ | 57½ |
| India | — | 29 | 165 | 29 |
| Intercontinental | 30 | 14 | 21¾ | 13½ |
| Kelly Springfield | 9⅝ | 9½ | 21½ | 9½ |
| do 1st pfd. | — | — | 74¼ | 60 |
| do 8% pfd. | 45⅝ | 45½ | 73¾ | 44½ |
| Lee | | 7 | 14 | 6¾ |
| Miller | 53 | 33 | 44¾ | 30 |
| do pfd. | — | 100 | 104 | 98½ |
| Mohawk | 25 | 24 | 65 | 24 |
| do pfd. | 38 | 67 | 80 | 67 |
| Seiberling | 21¾ | 20¼ | 28½ | 19⅛ |
| do pfd. | 96½ | 97 | 97 | 92 |
| Star | 5k | 8 | 15 | 8 |
| U. S. Rubber | 58⅝ | 60⅛ | 88¼ | 50¼ |
| do pfd. | 107⅛ | 106 | 109 | 101½ |
| U. S. Rubber Reclaiming | 12 | 12 | 21¼ | 11 |
| do pfl. | — | — | 90 | 85 |

## NEW YORK RUBBER TO ISSUE $300,000 BONDS

The New York Rubber Company, Beacon, N. Y., of which W. G. Andrews, chairman of the Tucker Rubber Corporation, Buffalo, is president, has mortgaged its property for $300,000 to the Manufacturers & Traders Trust Co., Buffalo, according to an indenture filed in the office of the County Clerk. The funds will be used to improve and develop the Beacon factory.

Bonds will be issued to the full extent of the mortgage. These will be known as first mortgage 7 per cent sinking fund bonds and will be in denominations of $100 and $1,000, with the interest payable semi-annually.

### Goodyear to Redeem Bonds

The Goodyear Tire & Rubber Co. has sent notice to the holders of its 10-year 8 per cent sinking fund gold bonds, due May 1, 1931, that the Central Union Trust Company of New York, as trustee, has designated by lot $1,315,700 principal amount of these bonds for redemption Feb. 1, 1927. The bonds will be redeemed at 110 and accrued interest, out of money in the sinking fund.

### Hudson Creditors Meet

William C. Duell, referee in bankruptcy for the Hudson Tire & Rubber Corp., Yonkers, N. Y., announced that creditors of the defunct corporation met at the County Court House in White Plains, N. Y., Dec. 3 at 2 p. m. The account of Samuel J. Joseph, trustee, which shows $8,560 on hand for distribution was examined.

### Crepe Sole Manufacturer

The Alfred Hale Rubber Company, Atlantic, Mass., is a small but prosperous rubber company chiefly known for the "Rajah" crepe sole. The company has other profitable lines such as canvas shoes, heels and soles, and specialties such as mixing belts. David A. Cutler, a rubber chemist of wide experience, is president and treasurer; Wm. H. Cook, clerk; and the directors are A. L. O'Shea, Charles F. Robbins, and John F. Morrill.

Capital stock consists of 2000 shares of no par common valued at $134,000. Recent certificate of condition is as follows:

| Assets | | Liabilities | |
|---|---|---|---|
| | | Accounts Payable | $6,181.45 |
| Real Estate | $21,784.74 | Notes Payable | 10,000.00 |
| Machinery | 48,324.48 | Reserve for taxes | 1,386.22 |
| Merchandise | 33,031.53 | Surplus | 4,268.75 |
| Tools, etc. | 854.22 | Common stock | 134,000.00 |
| Accts. Receivable | 36,963.15 | | |
| Cash | 6,340.80 | | |
| | 147,298.92 | | 147,298.92 |

## BRITISH FAVOR USE OF LIVELIER TENNIS BALL

At the annual meeting in London of the Lawn Tennis Association it was decided to ask the International Lawn Tennis Federation at the annual meeting in Paris next March to abolish the stitched ball and increase the minimum bound from 15 to 55 inches.

Complaint has long been made that Americans going to England or the Continent had to play for some time over there in order to become used to the change in the ball. On many occasions American players arrived so shortly before the start of a tournament that little time could be given to practice with the strange ball. Under the new rule recommended the English ball will be more similar to the one that has been standardized in the United States and which has long been held to be much the faster and livelier.

### Malayan Exports Increase

Exports of crude rubber from Malaya for October totaled 39,000 tons, against 28,000 tons in the same month last year. For the past ten months exports have aggregated 320,000 tons, a net increase of 64,000 tons over those for the corresponding period in 1925. The value of ten-month exports this year was $607,000,000 against $535,000,000 for the first ten months of 1925.


# 1780 - PROGRESS - 1927

IN 1780, the first Huber pigments—hand-made colors—were put into use. In 1927 we embark on a new year of service to the rubber industry, and it is our aim to uphold in fullest measure the high standards upon which we have built our reputation.

In Carbon Black we have shown a steady growth for the past ten years to a leading position in the industry, with a quality record surpassed by none.

During the past year we have acquired and developed a highly modern rubber clay plant, and we are now furnishing a real re-enforcing clay at the low cost of ordinary fillers.

In 1927 we plan to enlarge our scope by offering a full line of fine rubber colors made in our own factories, and designed to meet rubber compounding conditions.

Huber quality, Huber service, and Huber fair-dealing will continue as our guiding policy.

J. M. HUBER, INC.

CARBON BLACKS -- CLAYS -- DRY COLORS

130 West 42nd St., New York City


## GOODRICH REPORTS BIG DEMAND FOR FOOTWEAR

**Production Cannot Keep Pace with Sales of Footwear, Especially "Zipper" Line, although these Departments are at Capacity —Estimate 1926 Sales at $145,000,000.**

Officials of the B. F. Goodrich Company, Akron, report that sales of footwear especially items in the "Zipper" line, have been at record high levels, and although these departments are being operated at full capacity, orders from all sections of the country have been piling up until the demand is larger than the production rate. Department stores and retail shoe shops did an excellent business in "Zippers" for the Christmas trade, and a number of large department stores in the east and middle west sent rush orders for express shipments that would reach them in time to be sold for the holidays.

Provision had been made by the Goodrich company for larger sales this year, and as result fairly good-sized stocks had been accumulated, but the demand has exceeded all expectations and is causing production managers considerable worry. Although competitive companies have imitated the "Zipper" model with gaiters equipped with automatic fasteners something like that used on the Goodrich products, this fact has done nothing to reduce the company's share of the business, it is maintained. A new "Lo-Zipper" placed on the market this fall has had a great appeal to women, apparently because it is very smart in appearance. Larger sales of Zippers to men, however, have also been experienced.

*New Warehouse Helping Distribution*

The B. F. Goodrich Company is handling its distribution of footwear more efficiently than ever before by means of the new $2,000,000 warehouse in Akron, and the company has effected a considerable saving by the elimination of branch warehouses in several cities. The central warehouse is devoted almost exclusively to the storage of rubber footwear and the offices of that department.

Estimates of those in close touch with the management place 1926 Goodrich earnings in the neighborhood of $5 a share on the common stock outstanding. Based upon estimated sales for eleven months, the total volume will be approximately $145,000,000, so that Goodrich will probably retain its position as the third largest rubber manufacturer in point of business done. Sales volume for the first six months of 1926 was $67,890,000, compared with $136,000,000 for the entire year of 1925.


CATALPO!

# Personal Items-

Frank G. Harrison, Jr., who has been in the employment of the company for the past eleven years, has been appointed sales manager of the Albany division of the B. F. Goodrich Rubber Company. Mr. Harrison was in turn salesman, then manager at Providence for two years, and was then promoted to service manager for the New England district. Until his recent promotion, he was manager of truck and bus tire sales for the New England district. Previous to entering the employment of B. F. Goodrich, Mr. Harrison was in the shoe business with his father under the name of Kushion Komfort Shoe Company at Lynn, Mass.

* * *

P. W. Litchfield, president of the Goodyear Tire & Rubber Co., Akron, has donated $5,000 to the Akron Boy Scouts. The funds will be used at his request for development of a 414-acre tract at Boston Mill, Ohio, which was willed to the scouts by H. Karl Butler, late scout president. As a member of the past president's committee, Mr. Litchfield has been very active in promoting the interests of the boy scouts in the Akron area. He built the Goodyear scout lodge in Akron which has been in use for several years.

* * *

The city council at Cedartown, Ga., has changed the names of two streets in that city to Slusser Avenue and LaDue Avenue in honor of Cliff Slusser, vice-president and Abe LaDue, construction engineer of the Goodyear Tire & Rubber Co. The action was taken in recognition of Mr. Slusser's activities in building the new Goodyear cotton mills at Cedartown. Mr. LaDue was the company's representative in charge of construction.

* * *

Employees of the Rubber Exchange of New York on Christmas Eve presented a watch to Walter Dutton, secretary of the Exchange. F. R. Henderson, president, spoke a few words of appreciation on behalf of the Board of Governors. A Christmas fund contributed by the members was distributed among the employees of the Exchange.

* * *

J. H. Sheldon, assistant to the tire sales manager of the United States Rubber Company, married Mrs. Florence Winthrop Arnold of New York on Dec. 21 to the great surprise of his friends and associates, as he had been considered an inveterate bachelor.

Henry R. Platt, superintendent of the Columbia Tire & Rubber Co., Mansfield, Ohio, was elected president of the Amima Club of Mansfield at its annual election late in December.

* * *

Michael J. Kelliher has resigned his position in the sales department of the United Shoe Machinery Corporation to join the Panther Rubber Mfg. Company, Stoughton, Mass., as manager of factory sales, a new division.

* * *

Walter Fletcher, chairman of Hecht, Levis & Kahn, Ltd., London, rubber merchants, arrived in New York late in December in the interests of his firm.

* * *

William Y. Duncan has been appointed manager of tire factory sales for The Williams Foundry & Machine Company of Akron, Ohio. For the past 13 years, Mr. Duncan has been in charge of mechanical engineering with the Lee Tire & Rubber Company and the Fisk Rubber Company. He was the representative of these companies in the Tire & Rim Association and a member of the A.S.M.E.

CATALPO!

The Philadelphia Rubber Works Company

Manufacturer of

RECLAIMED RUBBER

of

STANDARDIZED QUALITY

NEW YORK
52 Vanderbilt Ave.

AKRON, OHIO PHILADELPHIA, PA.
Land Title Bldg.

## SAYS U.S. LAND BANKS COULD HELP GROWERS

Speaking before the Pan-American Commercial Congress in December at the Hotel Roosevelt, New York, Arrieta Gallegos, Baltimore consul of El Salvador, said that an amendment to the Federal Land bank laws which would permit the establishment of branch land banks in Central and South American countries would make it possible to produce rubber at costs considerably under those now prevailing.

Mr. Gallegos explained that high interest rates in Latin American countries hamper the raising of rubber, as six years must elapse before the production of the first crop and the initial outlay is about $500 an acre. Money for such operations must be borrowed at interest rates varying from 12 to 30 per cent.

### B. F. Goodrich Sued

The Lykes Bros. Steamship Company recently filed suit in Federal Court at New Orleans, La., against the B. F. Goodrich Company, Akron, Ohio, to recover alleged damages totaling more than $16,000, charged suffered through defects in two rubber bearings furnished its ships, the *Lake Florian* and *Lake Slavi* at Galveston, Texas. The plaintiffs maintain in their petition that the two bearings were installed at Galveston and that a single run to San Juan, Porto Rico, required their replacement.


IT PAYS TO MICRONIZE

AN enormous molecular tenacity—the tremendous grip of each tiny particle—makes MICRONEX supreme for rubber footwear. It means the utmost in resiliency and long wear.

MICRONEX makes possible a lighter weight tennis shoe—a tougher sole and heel. The sun will not crack it, nor will water readily rot it. The jet black color makes black varnish superfluous.

For all stocks for tennis foxing, soling, moulded soles and heels, and fibre soles, insist upon

MICRONEX

REG. U.S. PAT. OFF.

*The King of Rubber Pigments*

You will find that it pays to MICRONIZE. Samples and specific data furnished upon request.

Binney & Smith Co.
41 E. 42nd Street-New York City


## DECISION DELAYED IN MURRAY RUBBER CASE

Because of a Federal Court suit awaiting trial in Trenton, N. J., Judge Jess sitting as a Supreme Court Commissioner at Mercer Court House, Trenton, has agreed to delay his decision in the suit of the Murray Rubber Company, Trenton, against Sears-Roebuck Company, Chicago. Following the filing of a $5,000,000 damage suit by the Murray company, for alleged breach of contract, the mail order firm seized a quantity of crude rubber under a writ of replevin.

Judge Jess indicated at the conclusion of the hearing that he was inclined to favor the Sears-Roebuck contentions. Counsel for that firm sought to have the entire counter-claim and answer filed against the writ of replevin by the Murray company stricken out. Such action would relieve Sears-Roebuck of a high bond required when the Murray company filed a counter-claim to the crude rubber taken from its factory.

Briefs of both sides will be filed and studied by Judge Jess before he announces his decision. He stated, however, that a writ of replevin appeared to be a right to reclaim personal property and a counter-claim could not be set up in opposition to that procedure.

The crude rubber in question was shipped to the Murray factory to be manufactured into tires, and remained the property of the Sears-Roebuck Company, its counsel contended. The suit for $5,000,000 alleged damages was filed by the Murray Rubber Company last April. It was alleged in the petition that the Sears-Roebuck Company refused to accept finished tires, refused to furnish additional materials and failed to make payment on goods already delivered.

### St. Louis Dealers Elect

At the annual meeting of the Associated Tire Dealers of St. Louis held late in December, James Merril was elected president, C. V. Quinn, vice-president; and Joseph Delabar, secretary. These officers and the following make up the board of directors: W. L. Bowcott, Elmer Hilty, Walter Gilbert, E. L. Meyer, Jr., E. H. Steinman and L. B. Wyner. The officers will be installed at a dinner dance to be held at Claridge Hotel on Jan. 11, to which the entire automotive industry of St. Louis will be invited.

### Fisk Declares Dividends

The Fisk Rubber Company, New York, has declared the regular quarterly dividends of $1.75 on two classes of preferred stock. Both dividends are payable Feb. 1 to stockholders of record Jan. 15.

CATALPO!

## IMPROVEMENT NOTED IN ACCESSORIES DEMAND

With original equipment shipments affected by curtailment of motor car and truck manufacturing schedules in November and December and with trade sales showing a reaction from the high levels of late summer and early fall, the November shrinkage in demand for accessories was more than seasonal in volume. Manufacturers reported some quickening of activity in December, particularly in original equipment in anticipation of increased motor vehicle production after the beginning of the new year, according to the Motor & Accessory Manufacturers Association.

According to reports of a large group of members to the M. & A.M.A. November shipments of original equipment dropped to 79% of the January, 1925 base index as compared with 125% in October. In shipments to the wholesale trade the November index figure of companies reporting replacement parts business was 94 as compared with 116 in October, the accessories figure 83 as compared with 109 in October and the service equipment figure 119 as compared with 145 in October.

The dollar volume of parts, accessory and service equipment shipments has suffered throughout 1926 as a result of price reductions, some of them forced by competition and others brought about through economies in production and distribution. Despite the lower prices, however, a representative group of parts and accessory makers estimated net profits for the year slightly in excess of 1925. Even with low November and December production the year's aggregate business will be greater than in 1925.

Commenting on next year's prospects some manufacturers look for a volume about the same or slightly less than the current year's but a larger number anticipated a slight increase over 1926.

## APPOINT RECEIVER FOR RUBBER EXPORT FIRMS

Appraisal of the assets of the American Utilities Sales Company and the American Rubber Export Company has been ordered by Common Pleas Court in Akron, following the filing of a petition by the Sun Rubber Company, Barberton, Ohio, asking that action. H. T. Sterling, G. W. Dilly and F. W. Smith were named trustees and Roy L. Fairall, receiver.

It was stated in the petition of the Sun company that the greater portion of outstanding stock in the defendant firms is owned by Walter C. Cassidy and Oliver C. Moles, who act as officers of both sales companies.

### Kleinert to Build

The I. B. Kleinert Rubber Company, New York, manufacturers of dress shields, reducing garments, sheetings, aprons, bathing caps and similar products, has started work on the erection of an addition adjoining its present factory at College Point, L. I. According to Ralph K. Guinzburg, vice-president, rubber shower curtains will be manufactured in the new building, which will be opened about March 1. The addition will comprise two stories and basement, on a 50-foot plot.

### Join Rubber Pool

It was reported recently that the Chrysler Motor Company and the Mack truck organization had joined the rubber purchasing combine. Subscriptions to the operating syndicate are on the basis of $100 a ton. It has been made clear that the aim of the combine is not to fight British restriction but to offset speculation in the rubber market. Although the syndicate is already said to be operating, the market has been unable thus far to trace any of its purchases.

### Rubber Shares All Sold

According to an announcement in London, all of the shares in the recently-launched Para Plantations, Ltd., have been absorbed. Since the company was formed for the purpose of gathering and marketing wild rubber in Brazil, it had been felt that the British investing public would not be eager to purchase shares in it. Financial interests in London are reported as suspecting that the underwriters really had to absorb the larger part of the issue but this has not been proven. It is expected that this doubt will be cleared up when the shares are traded in on the Exchange.

### Federal Gives Party

More than 8,000 adults and 3,000 children enjoyed the 12th annual Christmas party of the Federal Rubber Company, Cudahy, Wis., held Dec. 18 in the Milwaukee Auditorium. The committee in charge of the affair included: Wiley Miller, Frank L. Greenya, William Dietrich, O. W. Lutz, W. K. Roberts, R. C. Salisbury and J. H. Roberts.


## CLASSIFIED ADVERTISING

10 cents a word, minimum charge $2.00, payable in advance.
Address replies to Box Numbers, care THE RUBBER AGE, 225 Fourth Ave., New York.

SITUATIONS WANTED

Rubber buyer (at present in London) with intimate knowledge and experience of Eastern rubber markets, also London. Is open to undertake exclusive rubber buying proposition, either in the East or in London, for first class house. Apply in first instance to Box 445, THE RUBBER AGE.

Druggists' sundries superintendant-chemist available. College graduate. Familiar with modern compounding and production methods. Ten years experience. Now employed. Box 444, The Rubber Age.

HELP WANTED

Wanted: Superintendent for rubber factory specializing in coated fabrics of all kinds. Must be absolutely up to date in compounding and factory methods. Give full information regarding experience. Box 447, The Rubber Age.

Get Business by Mail

60 pages of vital business facts and figures. Who, where and how many 8,000 lines of business covered. Compiled by the Largest Directory Publishers in the world, thru information obtained by actual door-to-door canvass. your prospects are.

Write for your FREE copy.

R. L. POLK & CO., Detroit, Mich.
958 POLK DIRECTORY BLDG.
Branches in principal cities of U. S.

CATALPO!

INTERNATIONAL PULP CO., *41 Park Row, New York, N. Y.*
SOLE PRODUCERS OF PURE **ASBESTINE** SPECIALLY PREPARED FOR USE IN RUBBER
Covered and Protected by Letters Patent Registered at U. S. Patent Office, Washington, D. C.
LIBERAL WORKING SAMPLE FURNISHED FREE

WITCO

DIRECT FACTORS

HEADQUARTERS

*Our Technical Service and Experience Offered in*

Aluminum Filler
Aniline Oil
Antimony
Asbestol Filler
Barytes
Benzol
BLACKS (Misc.)
Blanc Fixe
BLUES (Misc.)
BROWNS (Misc.)
Carbon Tetrachloride
Carbon Bisulphide
Carbon Black
Caustic Soda
Clays
Chromium Oxide
Diphenylguanidine
Fossil Flour
GREEN (Misc.)
Hydro Carbon
Infusorial Earth
Indian Red
Lamp Black
Lead Oleate
Lime
Litharge
Lead—Red
Lithopone
Magnesia
Mica
Mineral Rubber

## CHEMICALS, FILLERS and COLORS

**For all classes of mixing and cure supported by our own**

***Complete Experimental Rubber Laboratory***

COMMUNICATE WITH

## Wishnick-Tumpeer, Inc.

NEW YORK 253 Front St. | CLEVELAND Davenport & E. 14th St. | BOSTON 185 Devonshire St.

CHICAGO 365 E. Illinois St.

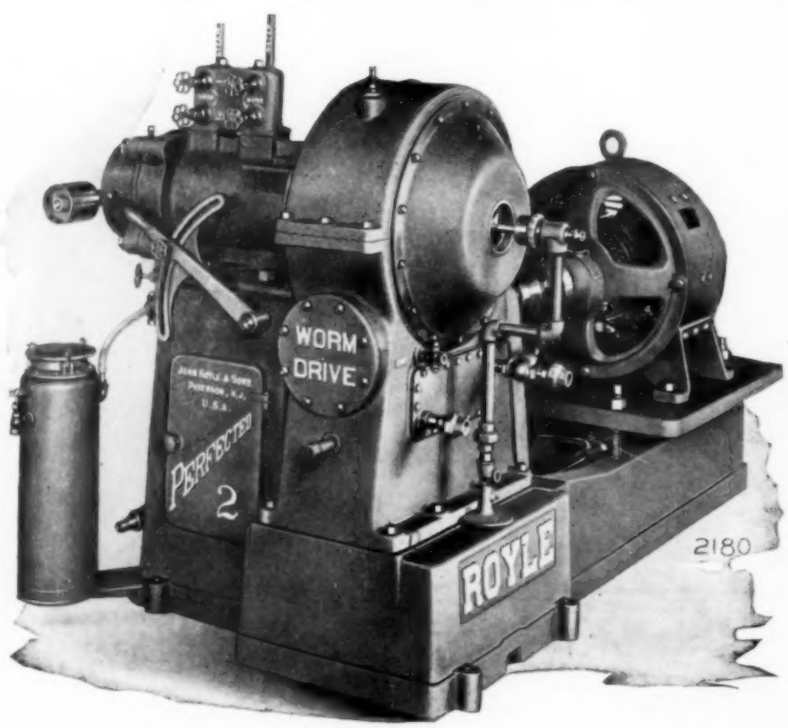
***"The Most Active Organization in the Field".***

Moldrite
Montan Wax
Ochre
Palm Oil
Pine Tar
Pine Pitch
Pitch—Burgundy
REDS (Misc.)
Red Oxide
Rosin Oil
Rubber Factice
Rubberite Compound
Rubtac
Slate Flour
Soap Bark
Soapstone
Stearic Acid
Sulphur
Talc
Thiocarbanilid
Titanium White
Triphenylguanidine
Ultramarine Blue
Vermilion
Venetian Red
White Lead
WHITES (Misc.)
Whiting
Wood Flour
YELLOWS (Misc.)
Zinc Oxide

## ROYLE PERFECTED TUBING MACHINES

have every practical facility for large production of tubed stock.

***Tubing Machines***
***Insulating Machines***
***Straining Machines***
***Circular Looms***




## JOHN ROYLE & SONS, Paterson, N. J.

The
# RUBBER AGE

The Only Twice-a-Month Rubber Publication

*Published by*

THE PALMERTON PUBLISHING CO., Inc.
Fisk Building, 250 West 57th St., New York, N. Y.
*Telephone*—Columbus 6430-31-32

P. L. PALMERTON — President and Editor

Published on the 10th and 25th of each month by Palmerton Publishing Co., 250 West 57th St., N. Y. C. and Highland N. Y. Address correspondence to N. Y. office.

Subscription rates: Domestic, $2.00; Canada, $2.50; Foreign, $3.00. Single Copies, 20c.

Entered as Second Class Matter, June 70, 1920, at the Post Office at Highland, N. Y. under Act of March 3, 1879.

Forms close 10 days before publication date. If advertising proofs are desired, two weeks should be allowed. Advertising rates on application.

Vol. 20 JANUARY 10, 1927 No. 7

## *Rubber in the Import Trade*

IN HIS annual review of the foreign trade of the United States, the Director of the Bureau of Foreign and Domestic Commerce has developed the interesting point that, contrary to the general understanding of the public, a less favorable balance of trade for this country may be an indication of its greater prosperity. In the year just closed, for instance, the balance of trade in favor of the United States will probably prove to be the smallest since 1910. Exports exceeded imports by from $300,000,000 to $350,000,000 whereas the annual average for the five years 1921 to 1925 was $947,000,000.

The public has generally understood that the greater the excess of exports, the more prosperous the country would be. In the case of the United States, however, imports are not of strict necessities but of materials which are principally in demand when the purchasing power of the people is high. As the Director suggests, prosperity within the United States means greater imports of tropical foodstuffs for our tables and more silk, rubber and other foreign raw materials for our factories. Thus a prosperous condition in the country, fostered by a large domestic demand, may boost imports considerably while exports are stationary or even receding.

Principal factors in our changing trade balance in 1926 were the high price of rubber and the low price of cotton. The average import price of crude rubber was approximately thirteen per cent higher for 1926 than for 1925. That difference increased the cost of our imports something like $60,000,000. This more than offset declines in the import price of sugar, coffee and other staples.

Although the price of rubber declined during 1926, it remained the leading item of import. Raw silk was in second place with coffee third and sugar fourth. The older men in the rubber companies who remember when imports of crude rubber were insignificant will see in this new leadership another sign of the greatness of the industry they have helped to build.

## *Simplification*

IN THE list of good things which might be wished for the rubber industry in 1927 would certainly appear relief from the hazards attending raw material purchases and some progress in standardization. With a further cut in the rubber supply through additional tightening of the British rubber restriction on February 1, which now appears certain, considerable fluctuations in crude rubber prices before the end of the new year would not seem impossible unless some powerful, artificial factor is introduced. Whether such a factor is to be available is not yet certain although it is comforting to know that a stabilizing organization will be at work.

It could easily be made more certain that the tire industry, as well as other sections of the rubber trade, will be bothered with less multiplicity of sizes and types.

Many believe that standardization in the rubber industry would be unusually difficult since so many of its products do not serve as independent units but are accessory to other machines or devices which dictate the variety in which they must be furnished. While this argument is based on sound fact, yet that condition is not the barrier to standardization that may be supposed. To a greater or less extent the same thing is true of all other lines. Simplification in variety of products has usually been achieved through agreement of manufacturers, distributors and users.

The principal part of the simplification work of the Department of Commerce has consisted in bringing together the various groups interested in a specific problem. Such assistance has proven effective in many cases, the list of which is constantly increasing. It would appear that the Department might well be given an opportunity to serve the rubber industry in this way in 1927.

## *The Philippine Report*

THE PHILIPPINE report of Col. Carmi Thompson, which was rather eagerly awaited in some sections of the rubber industry, does not promise to accelerate rubber development in the islands very much. The President's special investigator gave so much attention to rubber culture while he was on his mission that recommendations of unquestioned helpfulness had been looked for. Yet for the most part Col. Thompson's references to rubber in his report cover ground already reported upon by men more skilled in rubber culture. Furthermore, the general recommendations made to the President are not sufficiently definite or logical to aid Congress in changing the present deplorable situation.

The recommendation that changes in the laws controlling Philippine land be left to the Legislature at Manila without interference by Congress is unaccompanied by any reasonable justification or any assurance that the Legislature will act to remove the barriers now hindering agricultural development. The most unfortunate thing about the report, however, is the indefinite character of the recommendation concerning the independence question. It is merely suggested that the problem be left for settlement "some time in the future."

The political uncertainty of the Islands has always appeared to be as great a barrier to development as any narrow legislation. A definite solution of that question is even more important to large capital investment, but Congress, which must finally deal with it, will not find much assistance in the latest report to be laid before them.

*Maryland Ball Clay*
*New Jersey Fire Clay*

HIGH GRADE

*South Carolina Clay*
*Florida Clay*

POTTERY
PAPER

UNITED CLAYS

RUBBER
PAINT

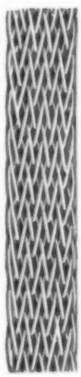
OF EVERY KIND FOR EVERY PURPOSE

*Pennsylvania Fire Clay*
*Kentucky Ball Clay*

UNITED CLAY MINES CORPORATION
TRENTON, N. J.

*English China Clay*
*English Ball Clay*

## Perfect Beads



Entire freedom from bead trouble in the construction of straight side tires is assured by the use of either National "(Patent)" High Tensile Strength, Flat Woven, Bead Braid or our new (Pratt Patent) Bead Cables. These cables, made to dimensions specified, have seven strands, yet only one piece of wire is used without soldered, welded or brazed joint.

*Write for working samples of either National flat braid or Pratt cables (no charge to tire manufacturers) and full information as to our products and service.*

Our engineering department tests beads and furnishes complete confidential reports as to their stretch, set and bursting point, without charge. Inquiries solicited regarding this special service.

**National Standard Company**
**Niles, Michigan**

## *RUBBER DRYERS*

**The Hunter Process**
**in**
**The Carrier Ejector System Dryer**

The successful drying of Rubber is essentially a problem of humidity control. The patented Hunter Process is used exclusively in Carrier Dryers. Carrier automatically controlled dryers reduce time space and milling costs.

*Write concerning your problem*

**Carrier Engineering Corporation**
**750 Frelinghuysen Ave., Newark, N. J.**

## USE "Sunny South" "Pentarco" "American"

[Thoroughly Established Brands]

## RETORT PINE TAR
**in**
**Tires - Tubes - Mechanicals - Reclaim**
*The Best Softener*
**with**
**Ten distinct functions**
**on which**
**We will gladly give information**

**Sold By**

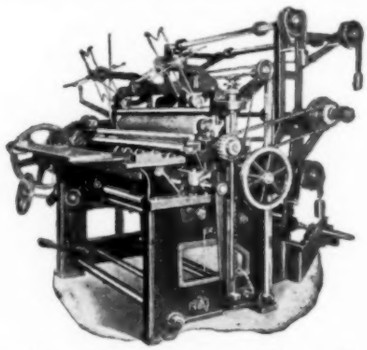
E. W. COLLEDGE
General Sales Agent
P. O. Box 356
Jacksonville, Fla.

J. C. MATHEWS
Eastern Agent
300 Madison Ave.
New York City

THE TYLER PATTERSON CO.
Cuyahoga Bldg.
Cleveland, Ohio

S. S. SKELTON
Western Agent
1605 Kimball Bldg.
Chicago, Ill.

## CAMACHINE 6-C



—for quantity production of all kinds of stripping used by the rubber industry. If you make, use or sell stripping, write for information to—

**CAMERON MACHINE CO.,**
**61 Poplar St., Brooklyn, N. Y**

# A Bus Line Without Spare Tires

*An Experienced Bus Operator That Prefers to Rely Entirely on the Service Fleet for In-City Lines*

By Felix J. Koch

AT CINCINNATI there is an interesting opportunity to study the operations of a bus company which has dispensed with spare tires on its buses and relies entirely on a fleet of service cars.

To begin with, Cincinnati is a typical Anglo-Saxon community—neither a world metropolis such as New York or London, nor an over-grown back-country town. The city has its long flat areas within which some buses operate entirely. It also has its steep and uncompromising chains of hills which other buses must climb. Very nearly every condition that a modern city bus must negotiate will be presented to the Cincinnati vehicles.

The tire inspector of the big City Transit Company, which has been playing hob with the city street railway system in Cincinnati, has had an unusual opportunity to study the use of tires under special conditions and it was to him that the author of this article turned.

*With the spare tire from the service car in place, the bus is ready to proceed. The passengers have gone on.*

"At the moment," the inspector said, "we have fifty-five motor buses operating between Fountain Square, which is the heart of the city, and the most outlying city and suburban points. We run buses of two standard makes. These buses hold thirty-three people each, and particularly in the morning and evening rush hours, they must expect capacity loads. When one figures the average fare to weigh one hundred fifty pounds, he can compute the load that the tires are asked to carry.

"There are advantages in sticking to one tire after tests have proven its quality and economy of operation. Particularly, the crews get to know the one brand and seek to get out of the tires the full mileage which they have learned is built into them. We have settled on one make of well known tire. We use two sizes, the thirty-four by seven for one class of buses and the thirty-eight by seven for the other cars.

"Whatever we are doing," the inspector said, "we do as a result of our own experiments and careful deductions from experiments on which we have collected data. One of the things which this has brought us to do is to put no spare tires on any of our buses.

"In the first place, full equipment of spare tires for all our buses would mean the investment of so many fares. Again, with the spare tire always handy on the bus, there is apt to be a phychological tendency on the part of the drivers toward carelessness in tire usage. We have proven to our complete satisfaction that it pays a service like ours best to maintain our own service cars and send our buses over their various routes without a spare on any of them."

The inspector went ahead to point out that the road service was tied up with the most careful service in the garages. He led the way to the long line of cars that had completed their runs and were temporarily housed. We were glad he chose to describe his service plan in detail.

"A given bus is in use in the in-city service throughout the normal day and is turned in at night," he said. "Just as fast as our force can get around to it every tire on every car is examined and gauged. We have our men work in pairs so that what may escape the eyes of one will likely be seen by the other. An ordinary tire gauge will do the work but we want to know beyond question that every tire is carrying its full pressure of air. The air pump is used if necessary.

"When the men have made sure that the tires are properly inflated, they next inspect them for nails, bits of iron and injuries. Above all we have learned that a stitch in time saves nine. Where a new tire is showing up badly under wear, we may of course return it to the tire company under our contract. But punctures and injuries are for our own account and for that reason we maintain a completely equipped repair shop where specialists in tire repair are on the job."

Part of the equipment of the shop, according to the inspector, is a fleet of three service cars. They are really up-to-date repair shops on wheels but with the emphasis on facilities for changing tires quickly.

"In one direction," the inspector said, "our buses go out as far as Kennedy Heights, a matter of nineteen miles. The farther the trip, the more regular commuters a company has and the more exacting the service must be. Let us suppose that away out near Kennedy Heights a driver with his load gets a good sized blow-out. He stops, goes to the nearest telephone and calls for a service car. Then by a sort of offensive or defensive alliance the lines have entered into, he hails the next bus bound for the same goal and transfers his passengers to it. If it is a bus of our own, there are no formalities; if it is a bus of another line, he gives each passenger a receipt and we settle later. Expediting the movement of the line's customers in this way has proven to be an ideal arrangement.

"Meanwhile, the driver awaits the service car. The one which is sent him depends upon the distance and the nature of the call. As soon as a service car finishes with one bus, the office is notified so that immediate directions may be given as to the place it is next needed. In this way we save time all around. There are two service cars of a smaller sort and one of a larger make.

"Arriving at the scene of the trouble, not a moment is lost. The repairman removes the injured tire. This is better than trying to have the bus driver do it since he has his bus, his receipts and the comfort of his passengers to see to. The repairman replaces the injured tire with an inflated one from the small supply of

[Concluded on Page 344]

# Surface Effect in Rubberizing

## *Various Methods and Materials are Used to Obtain Glistening, Smooth, Soft or Other Effects in Coating Rubberized Fabrics*

THE RUBBERIZING or coating of fabrics is usually carried out on the coating machine, when the fabric being made is to be employed for making raincoats, other clothing and medicinal supplies. This method of working is assumed to be common knowledge, and hence it will not be explained here, but certain refinements which have for their purpose the production of a certain definite effect on the surface of the rubberized fabric, will be discussed. This is known as the surface effect.

It is possible to subdivide the effects produced on rubberized fabrics into two groups. The first group includes surfaces without any special design or pattern. These surfaces may be of four different kinds, as follows: smooth, lustrous and slippery; soft or flexible; glistening like satin; lacquered. The second group refers to surfaces covered with designs or patterns, or printed fabrics.

Before going into detail on the methods employed for obtaining these effects and the various means employed to produce them, it must be assumed that the fabric is free from all errors in weaving, knots, holes or any impurities whatsoever. This is of course self-understandable and need not be developed any further here. However, this warning must be given, for there exists the tendency to allow small errors in weaving the fabric, to go unchallenged, and it is these very small faults which cause serious difficulties in the coating process and give a product which is not up to specifications. It must be remembered that when the rest of the surface of the fabric is perfectly smooth, it is just these small raised spots or faults which become very noticeable in the coated product. Hence it is absolutely necessary that proper attention be given to this detail, so that a perfect finished fabric may be obtained.

In order to obtain a finished fabric with a smooth surface, certain special details must be observed in the manufacturing process. Inasmuch as every fabric, no matter what the manner of weave may be, possesses on the one hand openings between the individual fibers, and on the other hand inasmuch as the crossings of the threads in the fabric produce raised and depressed spots, it is essential that the openings be filled in

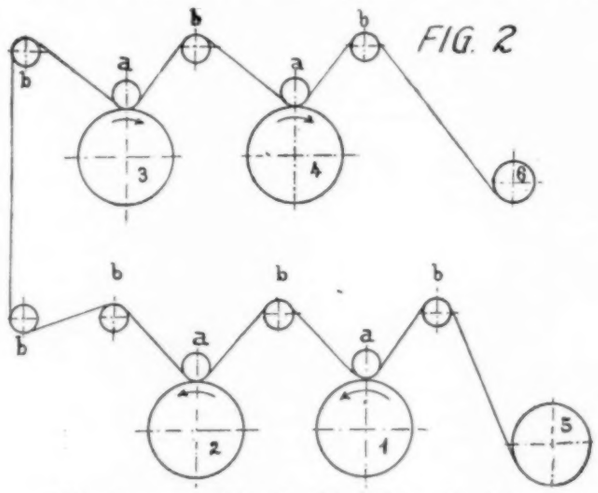
FIG. 1

and the uneven parts of the weave smoothed out. Figure 1 shows a weave of a common linen cloth binding. The cross-section of the fabric is shown. The weft threads cross the warp threads and form hollows and raised spots.

If the openings between the threads and uneven spots in the weave are filled in with rubber, then the first obstacle in the way of the production of a smooth fabric is removed, when the latter is calendered or ironed out. The calender employed for this purpose consists of two hard rubber rolls—that is cast iron rolls covered with hard rubber—located one above the other. These rolls are highly polished.

The upper roll can be shifted in a vertical direction and can be pressed against the lower roll at any convenient pressure by means of an arrangement of levers and weights. By increasing or decreasing the weights at the end of the levers, it is possible to change the pressure applied to the fabric, passing between the rolls, in any suitable manner. It is also well to make the rolls in such fashion that they can be heated when desired. This makes it possible to maintain the rubber coating on the fabric in a flexible condition during the calendering operation. This is particularly advantageous during the cold seasons of the year.

The pressure exerted on the fabric between the calender rolls results in density and its surface becomes uniformly smooth. All small uneven spots in the fabric still are counteracted. At this point care must be taken to see that the fabric is pressed uniformly and that the points at which pressure is applied on the surface lie close together. If this is not done




**Diagrammatic Sketch of Brushing Machine.**

there is danger that the irregularities in its surface will not be pressed out. If the pressure is too great, it is possible that instead of removing the irregularities in the surface, the high pressure will cause the formation of holes at these points which, of course, spoil the fabric. In accordance with the thickness of the layer of rubber applied to the fabric or with the number of coatings given it, one or more applications of this treatment are required. In most cases it has been found advisable to calender the fabric after it has been coated with the rubber solution a number of times and before it is to receive the last coating. After the last coating the fabric is strewn with the finest grade of talc procurable.

It is advisable to carry out these operations in a room which has been specially set aside for this purpose. The machines employed, known as dusting machines, consist of a framework for carrying the doctors or knives, an unrolling and winding up device and a number of carrying rollers, over which the fabric is led.

The talc is applied in a machine resembling that in which the coating is given to the fabric, with the difference that in place of the rubber solution the talc powder is strewn on the fabric at a point in front of the doctor. The consumption of talc for this purpose varies in accordance with the stickiness of the rubberized fabric. The excess talc that is not held by the rubber surface must be brushed off carefully, for if this is not done the talc will be washed away in the vulcanizing liquids in the case of the cold vulcanizing process, and at times it will stick to the carrying and vulcanizing rollers and form lumps, which will produce streaks on the surface of the rubberized fabric. In case the fabrics are to be vulcanized by the hot process, it is not so necessary to remove all of the excess talc before vulcanization.

Inasmuch as talc is a flaky mineral, it covers the surface of the rubberized fabric completely and gives it the characteristic slipperiness of that mineral.

The brushing machine is shown in diagrammatic form in Figure 2 above. This machine consists of four brushes, shown at 1, 2, 3, 4 and over each of these brushes or coating rolls there are arranged the press rolls which are carried in bearings that

*Gummi Zeitung*, Vol. 40. Pages 791-793.

admit of vertical movement of the roll. The unrolling device is seen at 6 and the rerolling device at 5. The carrier rollers or idlers are seen at *b*. The arrow shows the direction in which the brushing device is rotated and also indicates the direction in which the fabric runs through the machine. When the direction of the rotation of the brushes changes, then that of the fabric is also changed. The use of the series of four brushing devices makes it possible to coat the fabric on both sides. In order to avoid the dusting of the talc brushed on the fabric, the brushes are placed within casings and these are also provided with suction pipes for removing the talc that does not adhere to the fabric.

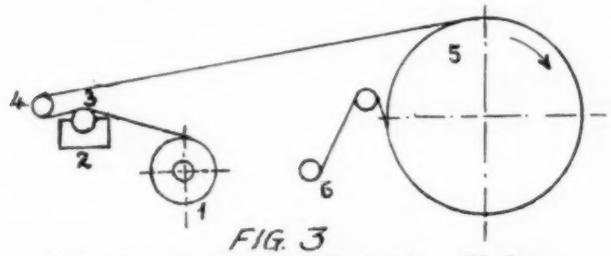



FIG. 3

**Diagrammatic Sketch of Lacquering Machine.**

The method of obtaining coated fabrics with soft surfaces is the same as that described for obtaining slippery surfaces. But the rubberized fabric, in place of being coated with talc, is covered with rice or corn starch of the highest degree of fineness. The surfaces treated in this manner become very smooth and flexible and the entire fabric attains this character. When the fabric is vulcanized with vulcanizing liquids in the cold, it is essential that all of the excess starch be brushed off before vulcanization.

If a satin-like, glistening surface is desired, either potato starch or corn starch meal is brushed on. Potato starch is more potent in this respect than corn starch. In both cases the effect of the starches is more powerful if they are applied right on the coating machine, while the fabric, after having received the final coating of starch composition is passed over a drying plate. Due to the greater degree of adhesive power possessed by the warm gum, a thicker coating of starch is thus obtained on the surface of the fabric.

The intensity of luster depends to a large degree on the manner in which the fabric is vulcanized. Rubberized fabrics, which are vulcanized in the wet method by means of a vulcanizing liquid, such as a solution of sulphur chloride in carbon disulphide, show less luster. This is due to the fact that the rubber on being moistened with the vulcanizing liquid swells up and absorbs a part of the starch flour. For this reason it is better to vulcanize the product by the dry method, using sulphur chloride vapors, for then a very fine satiny finish is obtained.

In all cases the following conditions must be closely observed: The various powders used must be as finely ground as possible. They must be employed dry, for it only in that condition that they will produce the desired effects. For this reason the powders are best kept in a drying oven. Furthermore, the rubberized fabric after being spread over with the powdered substance must be rolled up with moderate tension. Finally, during the powdering or dusting process, the powdered surface must not be moved or touched, for every finger mark remains visible upon the finished fabric. The lifting and carrying of the rolled up fabrics causes pressure spots which are visible in the various turns of cloth in the roll and causes cross-strips, for the powder is pressed into the gum on the pressed side and is taken up by the rubber.

If it is desired to obtain a perfectly smooth and faultless surface, it is necessary to handle the rubberized fabric with the greatest care from the time the powder is spread over its surface to its vulcanization. In that time period it is most sensitive to all influences.

Various lacquers or varnishes are employed to obtain a glossy surface. The essential condition in this process is to see that the surface is smooth enough to receive the film. This is a most important matter, for when a surface is covered with a lacquer even though it contains defects, it is found that not only does the lacquer fail to hide these faults but actually makes them appear more in evidence. Small rubber crumbs, fabric fibers and other impurities easily adhere to the sticky surface of the rubberized fabric during the coating operation. The fabric is charged with electricity of greater tension during the coating operation and hence draws these small particles to it. Hence, the greatest emphasis must be put on cleanliness in a plant where this kind of rubberized material is manufactured. It is very advisable to keep the floor of the room—particularly under the coating machine—constantly sprinkled with water in order to lay the dust and prevent these fine impurities from attaching themselves to the coated fabrics.

The rubberized fabrics may be vulcanized either in the cold or at an elevated temperature. In the case of warm vulcanized fabrics the sulphur content of the rubber mixture must be kept within exact limits, in order to avoid the precipitation or blooming of the sulphur. The blooming takes place only when an excess of the element is present. It is well known that when this happens, it is only a comparatively short time before the entire rubberized fabric is covered with a grayish film. The sulphur exuded soon penetrates through the film of lacquer or varnish and spoils the luster of the finish.

Colorless lacquers and varnishes are employed when it is desired to have the color of the rubber appear through the film of varnish. In this case solutions of shellac are employed, in which either alcohol (denatured ethyl alcohol) or ammonia may be used as solvents. If it is desired to form black surface coatings, as in the manufacture of raincoat fabrics, a black aniline coloring matter or lampblack is incorporated with the shellac dissolved in ammonia.

A diagrammatic sketch of the apparatus that may be used for lacquering is shown in Figure 3. The fabric roll is placed on a shaft supported by suitable bearings on either side and is also provided with a brake-control device, so that the unrolling fabric is maintained under a certain definite tension. A trough 2 is also provided in which the coating roller 3 turns. A guide roller is shown at 4, and 5 is a drying cylinder which is furnished with a mechanical drive. The mechanical rewinding roll is shown at 6.

The method of operating this arrangement is as follows: The fabric is warmed by allowing it to run over the heated drying cylinder 5 and is then wound up on the roll 6. Then it is unwound from the roll 6, allowed again to run over the drying cylinder and is finally wound up again on the roll 1.

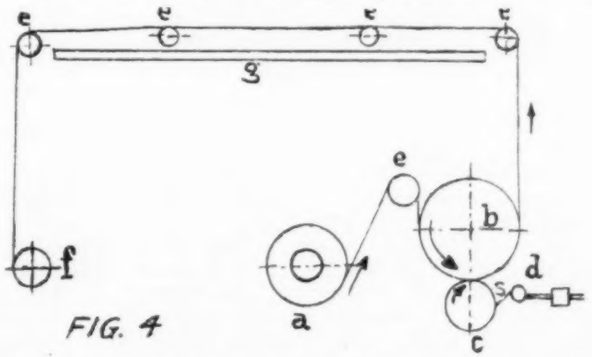



FIG. 4

**Diagrammatic Sketch of Single-Color Printing Machine.**

In this case the guide roller 4 is placed in front of the coating roller 3, and the fabric reaches the drying cylinder 5 without coming in contact with the coating roll 3. Now the trough 2 is filled with the lacquer to such a level that the coating roller 3 dips into the same to a sufficient depth. The solution of shellac in ammonia, which is also called a water lacquer, is heated on a water bath before being used. When a spirit varnish is employed, it is not necessary to heat it.

The varnishing or lacquering is finished in the described manner, but with one difference in that the guide roller 4 is placed in front of the coating roller by means of a suitable

**[Concluded on the next page]**

# Farmer to Find Guayule Culture Profitable

## *Average Return Per Acre of Guayule Is Expected To Exceed Profits From Many Better Known Crops*

IN A recent review of the rubber situation which they have published under the title, "Rubber, A National Necessity", Hornblower and Weeks, New York brokers, express the opinion that the growing of guayule shrub should be a profitable proposition for farmers in semi-dry and irrigated territory. According to the author of the review, the studies of the Intercontinental Rubber Company compared with data compiled by the United States Department of Commerce, show that California farmers growing the guayule shrub without irrigation and harvesting the shrubs 4 years after planting, should receive a minimum gross return of $140 per acre or an average yearly return of $35 per acre, compared with an average gross return for the entire country from 1920 to 1925 inclusive of $16.02 per acre for wheat, $20.05 for barley, $32.44 for cotton and $19.16 for corn. This comparison clearly shows that once the farmers realize the possibilities in guayule, there would be no difficulty in obtaining a constantly increasing acreage planted to guayule.

The brokers state that contracts with farmers include a profit-sharing agreement depending upon the price of rubber. If rubber averaged 48c a lb., the farmer would receive as high as $60 per acre for the use of his land and cultivation of the plants. The possibilities of this development can be visualized when it is realized that only 40,000 men and 2,600,000 acres would be required to raise sufficient guayule to produce the estimated rubber requirements of this country in 1928. Any such growth within a few years is, of course, impracticable and would be uneconomical, resulting in a collapse of the rubber market. A steady growth is to be desired and every pound so produced would mean a saving of capital lost to the country.

Fortunately, the review continues, the Intercontinental Rubber Company is in a position to develop this industry. Its balance sheet showed, as of June 30th last, cash and marketable securities of over $2,500,000, compared with total current liabilities of only $274,000. The Company has been steadily increasing the production from its present Mexican wild sources of guayule and it has a capacity of 9,000,000 lbs. from its four Mexican factories, which resumed operations in 1921.

Intercontinental's production of guayule rubber in recent years has been as follows: 1921, 64,802 lbs.; 1922, 615,770 lbs.; 1923, 2,742,779 lbs.; 1924, 3,076,200 lbs.; 1925, 8,108,500 lbs. Production for 1926 was somewhat adversely affected by weather conditions in Mexico but is thought to have run close to 8,000,000 lbs.

Whereas the average extraction of dry rubber from dried plants in Mexico is now approximately 12 per cent, the extraction from the earliest cultivated ones was substantially higher and is expected to be further increased in the future. Special machinery for collecting seeds, transplanting and cultivating the plants and special extraction machinery have been developed, so that the production per man in this country of rubber from the guayule plant is 15 times as great as the production per man of plantation rubber in the Far East, resulting in comparable costs even with the higher American wage scale. On a 200 acre ranch in California, over 90 per cent of the seedlings transplanted have survived.

---

# Surface Effects in Rubberizing

[Continued from Page 343]

lever device. This has the effect of making the fabric pass over a part of the circumference of the coating roller 3 and the latter being set into motion in this way turns in the trough and applies the varnish to the rubberized surface of the fabric. The process is then repeated until the desired luster is attained.

Fabrics, rubberized on one surface and intended for the manufacture of raincoats and the like are usually provided on the rubberized side with a satiny or lustrous surface. This sort of finish is obtained in a manner similar to that already described. This treatment makes it possible to give the rubberized side of the fabric the appearance of a lining fabric.

The printing machine is made so that one or more colors can be printed with it. Figure 4 shows a diagrammatic sketch of the single color printing machine. The roll of fabric *a* is carried on a suitable shaft. The pressure rollers *b*, which are provided with a rubber coating, can be pressed in a vertical direction against the engraved roller *c*. The printing roller is engraved with the design. The doctor *d* is pressed against the printing roller *c* by means of a suitable lever and weight arrangement and carries the printing color composition. The doctor *d* allows only just that much color to flow from that can be taken up by the engraved design on the roller *c*. The fabric is led over the carrying rollers *e* to the hot plate *g* where it is dried. A heated cylinder or drum can also be used in the place of the hot plate. The rewinding arrangement is shown at *f* and is mechanically operated.

The rubberized fabric is bestrewn with corn meal after the final coating and then carefully brushed off in order to remove the particles of flour that do not adhere to it. Then the fabric is printed. This is accomplished with colored solutions of rubber of suitable composition. The fabric about to be printed is sewed to runners which are connected to its beginning and end, and whose length is equal to the distance between *b* and *f*. The color is fed to the doctor *s*, the roller *b* is pressed against *c* and the machine is started working. While the engraved roller *c* rotates, the engraved design fills with the color solution and this is carried over to the fabric *s* which is pressed with its rubberized side against *c*. The fabric during its passage to the rewinding machine is dried over the hot plate *g* and then is wound up on *f*.

The printing of the fabric in several colors is effected in the same manner, and the printing machine is provided with a rubber coated cylinder in the place of a pressure roller.

---

# A Bus Line Without Spare Tires

[Continued from Page 341]

spares which he always carries. He takes away the old tire, and the bus is on its way.

"Naturally there are many in tiredom who oppose this method," the inspector admitted. "They believe it is better for each bus to carry one or two spare tires and have the driver make the changes and bring in the injured tires just as is done on the interurban lines. We believe the difference in interurban and in-city service is great enough to warrant the great change which we have made in servicing. One of the things that has influenced us is the depreciation of the tires carried as spares. No matter how such tires are carried, they are certain to weather. Exposure to the sun, even through the best of covers, is sure to injure the casings. The spare tire is in reality baking inside the strongest, thickest cover that can be used. Other weather conditions also affect them. Lastly, the more thorough the covering or wrapping, the less apt the men are to make correct inspections."

# Papua, The Future Malaya

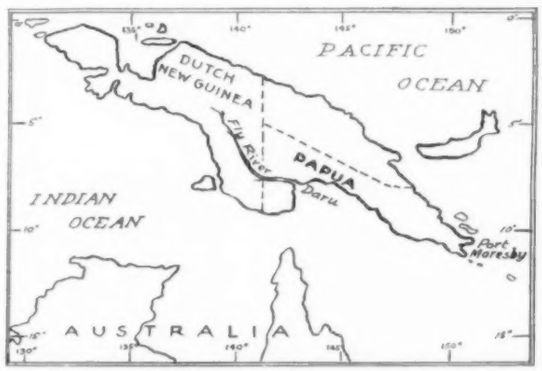
*Another Little Known Territory That Offers Good Opportunities for Rubber Cultivation*

**By S. R. Smyth**

**Discussions of extending the world's rubber acreage naturally center around those territories in which the largest area has been planted in the past. However, it need not be concluded that the most profitable new planting will be in such districts. There are unquestionably drawbacks as well as advantages in concentrating rubber production in two or three countries. There is accordingly an increasing interest in the lesser known tropical territories where conditions appear to be suitable for growing Hevea. Data on many small countries is still lacking in spite of the investigations of the last four years. The author of this article has resided and worked in Papua and is at the present moment still concerned with rubber culture. He calls attention to natural conditions in that virtually unknown country which promise good results for rubber planters who follow the lead of a pioneer British company.**

THE island of New Guinea lying to the north of Australia is probably one of the richest countries in the world but due to various political and internal strifes and the savagery of the natives it has not been developed to any appreciable extent. Papua, located in its southern part, is today one of the few remaining portions of the earth's surface which is, comparatively speaking, unknown and unexplored.

Originally it was a Crown Colony, but was later handed over to Australia as a mandated territory. The Australian Government did not become very enthusiastic about their acquisition and more or less left the country to shift for itself. It is true that a semblance of law and order was introduced. Magistrates and district officers were appointed and a simple form of government was established along the coast. But due to the apathetic attitude of the government and the lack of interest from outside sources, the possibilities of the country have not even been scratched and it remains today, as it ever has been, potentially one of the world's richest areas.




*Papua lies in the 10° rubber growing zone.*

Endowed by nature with a tropical climate in the coast and river districts and with a temperate climate in the high lands, the country has every advantage of the tropical and temperate zones.

One company has made a serious effort to develop the country and to a certain extent has met with success but lack of the all-essential capital has prevented any rapid progress. However, for the progress that has been made, Papua is indebted to the efforts of the British New Guinea Development Company, a London-Australian concern with offices in Port Moresby, the capital of the country.

The British New Guinea Development Company were quick to see the possibilities of rubber growing in this land. Plantations were started and in spite of rather crude methods met with success. It was the verification of the adage of the old Straits planter that "the rubber tree would grow in spite of the planter."

This is particularly true in Papua. The planters on the New Guinea Companies estates were mostly amateurs and consequently the trees suffered considerably through inferior and careless methods of tapping. A kind providence has withheld the usual run of diseases and pests which frequent the ordinary estate in the East. Black Bast, for instance, is practically unknown in Papuan estates.

In 1921 the British New Guinea Company had under cultivation and tapping some five thousand acres of rubber. With the exception of a couple of independent estates of a few hundred acres owned by individual white settlers this represented the total rubber planted in the country. The rubber slump hit Papua hard. The planted areas were just beginning to pay their way when the crash came and most of the acreage was allowed to slip back into jungle.

The writer has been through every plantation in Papua and in comparing them with the estates in Malaya and the Dutch East Indies ventures to state that they are far superior to the average estate in either of these countries. The yield is considerably higher per acre and the cost of upkeep is far below that prevailing in Malaya or the Dutch East Indies. Rubber planting in the long run resolves itself into a problem of labor and in this respect Papua is richly endowed. It has a very large native population and these natives make excellent workers subject of course to constant supervision.

The Papuan native may be taken to represent a triumph of white civilization. Thirty years ago he was killing and eating his fellow man, today he is an industrious workman attending church on Sunday and generally leading a temperate life. That is the native who comes into contact with European civilization. In the hinterland and far up the rivers the native is still a cannibal, uncivilized and untamed.

These natives can be recruited freely in the estuary of the Fly River for plantation work. The population in this particular region is difficult to estimate. No census has ever been taken but it is presumed to be in the neighborhood of 250,000 as it is one of the most thickly settled portions of the country.

The Fly River native is a strapping fellow and a hard worker. He is quick to learn and can be trained to be as good a tapper as the Tamil or Chinese. The rate of pay is comparatively small being but $2.50 a month as compared with the Tamil in Malaya who earns around $6.00 a month or even more.

There is an almost unlimited supply of land lying along the banks of the Fly, Bamu and Kikori rivers. The soil is

"A carcass in which the Friction Rubber is slightly compounded appears to stand up better under test than one in which 'Pure Gum' is used."

U. S. Bureau of Standards. Technologic Paper No. 318
"Endurance Tests of Tires" May 25, 1926

HORSE HEAD
XX*
ZINC OXIDE
is the logical constituent for friction rubber. It promotes:

ACCELERATION
TACKINESS
GOOD WORKING QUALITIES
HEAT and AGE RESISTANCE

*(Rubber-tested!)

New Jersey Zinc

The New Jersey Zinc Company
Established 1848
Products Distributed by
The New Jersey Zinc Sales Company
160 Front Street, New York City
CHICAGO · PITTSBURGH · CLEVELAND · SAN FRANCISCO

rich and alluvial and generally conforms to a natural drainage as it slopes gradually away from the river's banks. The temperature in the river regions is around 85 to 97 degrees Farenheit while the rainfall varies from 95 to 120 inches a year according to locality. There is no period of prolonged drought and the rainfall is very even.

The Freshwater Plantation of 375 acres, all in bearing and located about 200 miles up the Fly River from Daru, may be taken as typical of what a Papuan plantation can be made to produce. This estate is operated by its owner, Mr. Freshwater, who prior to coming to Papua had no practical experience in rubber planting.

In the writer's humble opinion this is probably the best estate of the many he has visited throughout the East. The ground is as clean as a floor. The trees are from five to seven years old and extremely sturdy being planted about 80 to the acre. The yield is in the neighborhood of 400 pounds to the acre which is higher than the average of Malaya.

Weeding is kept well in hand and so far Papua has not been troubled by lallang. White ants of course have to be reckoned with but they seem to be only of minor importance. As was previously mentioned drainage takes care of itself and there is practically no loss of soil as the nature of the ground and its formation is such as to prevent this.

Typhoons are unknown and only occasionally does a "gubu" or high wind sweep over the country. The duration of these storms is very brief and the damage caused is slight.

Transportation facilities in the country are non-existent. That is to say there is no system of roads or railways. But nature has provided New Guinea with the finest system of waterways in the world. Throughout the island there are numerous great rivers navigable for many miles from their mouths by ocean going steamers and for hundreds of miles by shallow draught vessels.

### Land is Inexpensive

Land is held on a 99 year lease subject to an annual rental of 5 cents an acre with provisions for improvement work to be carried out by the lease-holder.

Papua does not lie far off the steamer routes. Indeed the rubber growing region, or rather the area suitable for rubber growing, running into several million acres, lies within a few hours sail from Thursday Island, a port of call for numerous lines running from Australia to Europe and Singapore.

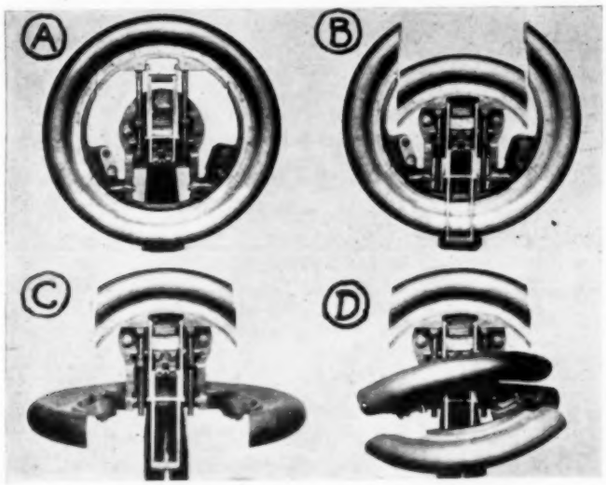
The climate is not unhealthy. It is tropical and naturally Papua is not by any means a health resort but the death rate is low among natives and Europeans and the country is not subject to any plagues. Malaria is the most common disease and it is chiefly confined to the foreign population, the natives not suffering much from it.

The attempt of this article is not to paint Papua as an Eldorado. Papua is a country of great possibilities not only in rubber but in other tropical products and in minerals and oil. Australia is awakening to this fact. The "White Australia" policy has had the effect of hindering the development of Papua but now the people are awakening to the fact that in this mandated territory, long regarded as an expense, they have an acquisition which promises to become a great asset.

The tendency is to welcome outside capital. The government wants the country developed and are prepared to make concessions to any concern that is prepared to carry out such work. Being independent of the Imperial Government in local legislation, Papua would not come under any restriction acts similar to the Stevenson Plan so that, although within the confines of the British Empire, the country is not subject to the edicts of the British Colonial Office or subservient to the decrees of that department.

In Papua there are millions of acres suitable for the production of rubber, an ample supply of excellent native labor and ideal climatic conditions. These things give the country an advantage which the world will surely begin to realize soon. While up to the present time no important developments have taken place, the day is probably not far distant when this fertile country will see a great expansion in its rubber acreage and will become in the next decade what Malaya has been in this decade, the rubber store-house of the world.

## INDIA CORES & CHUCKS
FOR
## *ALL DIAMETER TIRES*




**Cores, Tire Molds, Mold Rings, Bead Setting Rings, Individual Vulcanizers.**

***Special Rubber Machinery***

**INDIA MACHINE & RUBBER MOLD CO.**
**AKRON, OHIO**

*License Granted to Bridgewater Machine Co.*

**BROADCASTING**
***for the New Year—***
**OPPORTUNITIES**
**to users of Rubber Machinery & Equipment**

# Rubber Machinery
**of all sorts on hand for immediate disposal**

64″ Spadone Bias Cutter complete, with Motor, let off, and Take up.
62″ Cameron Slitter complete.
No. 1 Royle Perfected Tubers.
Experimental Mills.
8 x 16 Farrell 4-roll Calenders with extra rolls.
4 x 6 Q. D. Biggs & Allen Vulcanizers.
4″ 6″ & 8″ Allen Tubers complete.
1 Farrel 42″ 3-roll Calender, Motor drive, with 75 H. P. Motor.
1-4 roll 66″ Textile Dryer complete.
1 unit-2 48 x 18 Farrel Mills with encased reduction drive.
Full line of all Rubber Machinery on hand.

**Just phone us at our expense—Trenton 5864.**
*Representative will call.*

**EQUIPMENT COMPANY, INC.**
**431 First National Bank Building, Trenton, N. J.**
WAREHOUSE OFFICE—222 Walnut Avenue.
3 blocks from Main Station.
We specialize in purchasing complete plants.
REFERENCE—Mechanics National Bank of Trenton.

# WHITING
Domestic

## SUPERFINE

**Snow-White**

**300 mesh**

**A *quality* product at moderate price**

## WM. S. GRAY & CO.
**342 Madison Ave.**
**New York**

## THE HARSHAW FULLER & GOODWIN CO.
***545 Hanna Bldg.—Cleveland, Ohio***

## CHEMICALS - COLORS - PIGMENTS
***For***
## RUBBER MANUFACTURERS

**GLYCERINE**

LEAD OLEATE — LITHARGE
CHROMIUM OXIDE — RED LEAD

**ANTIMONY SULPHURET**

BLANC FIXE — HYDRATED LIME
CARBONATE PINE TAR — **-MAGNESIA-** — HEAVY CALCINED ROSIN OIL
"DIAMOND" — **-MICA-** — "SILVER SHEEN"

**WAREHOUSES**

**Cleveland - New York - Philadelphia**
**Chicago - Elyria - Trenton**

# CUMAR
*(Paracumarone Resin)*

## A Neutral Gum
*for*
## Rubber Compounding

*Clean and free from grit—*
*Resists water, acid, alkali*

**Hard and Soft Grades**

*Samples, price and descriptive literature will gladly be sent upon request.*

The Barrett Company

40 Rector Street New York City

Barrett
CHEMICALS

## EMBOSSING CALENDERS
**For Artificial Leather, Oil Cloth, Carriage and Automobile Covers**

## DRYING MACHINES
**with Copper or tinned iron Cylinders for Cotton Ducks, Drills and Sheetings**

## The Textile-Finishing Machinery Co.
**OFFICE, No. 83 EXCHANGE PLACE**
**PROVIDENCE, R. I.**

**When you feel the need of buying or selling rubber equipment, are looking for competent help or seeking a responsible position, the classified column of THE RUBBER AGE, the only "twice-a-month" rubber publication will prove advantageous. It covers the field first.**

"DURO" BRAND

# GUAYULE RUBBER

Washed and dry, ready for compounding. Invaluable in conjunction with Plantation Rubbers and Reclaims as an aid in Compounding. Especially useful in all Friction Stocks.

CONTINENTAL RUBBER CO., OF NEW YORK
120 BROADWAY NEW YORK CITY

# RECLAIMED RUBBERS

**UNIFORM** **RED BLACK GREY** **RELIABLE**

## THE DEFIANCE RUBBER COMPANY
**DEFIANCE, OHIO**

# The London Letter

The GENTLEMAN FROM MINCING LANE will report current opinion in London's famous rubber market in every issue of THE RUBBER AGE

## This Week the Gentleman Examines the Latest Diagnosis

LONDON, 23rd December, 1926.

"A DOCTOR Turned Rubber Expert and Statistician" might be the subject of this letter. I refer to Lt. Col. Kunhardt, a retired British Medical Officer of the Indian army, whose two hobbies are rubber and rodents. Dr. Kunhardt approaches his subject this time, as before, with a trained scientific mind and his "Review of the Rubber Position" is well worth reading.

Retired persons of advancing years are likely to take the long, rather than the short, view and Dr. Kunhardt is no exception in his approach to this subject. I might make one very important exception, and that is in regard to the reclaimed rubber industry and its increasing importance. Lt. Col. Kunhardt makes only a passing reference to it, and Rubber London, though fully aware that one-third of the rubber consumed in the United States in recent months came from the reclaiming plants, still expects that it is only a matter of time before larger supplies of crude rubber will be needed again because the tyres now being made with reclaimed rubber will prove to be inferior and will not have a satisfactory life.

Having thus backed into the contents of the Kunhardt book, by discussing what is not included therein, I will go on with what is:

"It appears to me that until the principal buyers and sellers of rubber are accustomed or prepared to view the position, study it, and carry out transactions for a period of *at least 4 or 5 years in advance*, it would be inadvisable to abandon completely the restriction organization or machinery" he says, writing before the announcement of an American buyers' pool.

LT. COL. KUNHARDT takes this position in concluding his contention that the crucial factor is future supply and its sufficient stimulation and maintenance. To suitably provide for the future he thinks it absolutely essential that the consuming interests should furnish the growing interests a definite idea of their requirements sufficiently in advance so that the necessary number of rubber trees can be planted six or seven years before they are needed. This is comparable to a sales organization giving a manufacturing plant an estimate of the number of units which will have to be made to supply the company's customers. Lacking such a forward position, Dr. Kunhardt says there is nothing to do but to continue the Stevenson scheme.

All of this reminds me, and I would remind you, of my words on this subject a fortnight ago, viz.—that the growers would have to provide a combination for selling control, similar to the American combination for buying, or the restriction scheme will prove to be a fixture instead of temporary.

To continue with Dr. Kunhardt's views, he thinks that two shilling rubber is essential in order to get planted annually the 200,000 acres for replacing losses due to old plantations becoming less productive and the 400,000 acres of new planting (annually) which he estimated to be needed after 1937 to take care of a 10 per cent annual increase in demand. He further points out that from 1919-26 not over 100,000 acres have been planted per annum.

Of course, no one will deny that this business of the future requirements is by far the best argument for organized restriction if it can be done effectually and fairly. Will Dr. Kunhardt's patient, the rubber industry, develop sufficient reserves under the influence of his physic administered in more increasingly powerful doses in 1927 (70 per cent from Feb. 1st on and possibly 60 per cent from May 1st on) or will some competitor under other auspices quietly take over his job, not being bothered with such strict sanitary supervision? Col. Kunhardt is undoubtedly an expert on the subject of rubber production, and when speaking facetiously about his study of the industry, it is not my intention to in any way weaken his authority.

WITH this question of increasing foreign competition in mind, The Manchester Guardian and similar free trade papers have continued to warn Mincing Lane that while they may have a "rubber Christmas" this week, they may not continue forever to have a recurring happy rubber new year.

Quite aside from the coal dispute, falling prices for raw materials have been the bane of more than one British industry in this past year. Raw cotton has been on the toboggan for three years now, and of course cotton is almost as important a raw material to the rubber manufacturer as is raw rubber itself. Now that the coal dispute is at an end, coal, iron and steel prices are also sliding down hill—the same as has been true this year of raw rubber. The manufacturer cannot get a satisfactory toe-hold on this slow-moving avalanche. Reviewers of the business situation may not know whether to describe the result as "disastrous", but the year has certainly been a difficult and loss-producing one for British industrialists.

In the Deputy Chairman's speech at the General Meeting of the British Goodrich Rubber Company, these conditions were commented upon. The Company has continued to run its British works with full complement of operators as usual and to meet all demands made upon them, but abnormal expenditures were incurred as a result. Even at this time, with fuel charges rapidly declining, the Deputy Chairman points out that their fuel costs "are still practically double normal".

In concluding my last letter to you of this eventful year, may I, Mr. Editor, comment upon the extraordinary progress made by your paper and the flattering testimonials to this effect to be heard in various quarters in London.

Yours Faithfully,

THE GENTLEMAN FROM MINCING LANE.

WE offer a service of practical experience for the purchase or sale of crude rubber on a commission basis.

We also offer comprehensive facilities to all users of and dealers in rubber for covering their requirements and hedging their commitments by contracts for the future delivery of rubber on the Rubber Exchange of New York, Inc.

Messrs. Harriss, Irby & Vose, of New York, are our clearing brokers.

*Correspondence invited.*

HENDERSON BROTHERS & CO., Inc.

BROKERS IN CRUDE RUBBER

*New York Office* — 60 BEAVER ST.
*Akron Office* — OHIO BUILDING

H. H. Henderson, *Pres.*
H. M. Henderson, *Vice-Pres. & Treas.*
M. C. McComas, *Secy.*

Telephones Whitehall 9630 9631 9632 9633

*Members Rubber Exchange of N. Y., Inc.*
*Cable Address*—Harhenbro, New York

**Charles T. Wilson Co., Inc.**

**82 Beaver Street New York**

***Importers of***

# CRUDE RUBBER

**Members Rubber Exchange of New York, Inc.**
**Members Rubber Exchange Clearing House, Inc.**

**AKRON OFFICE: 507 Second National Bldg.**
**Telephone Main 3799**

# GRASSELERATOR
## No. 808

HIGHER PHYSICAL PROPERTIES
*from the use of*
RECLAIMED RUBBER

We have proven conclusively that good quality tires, *with treads that will wear*, can be made with larger percentages of reclaim and mineral rubber in the recipe, in fact, are being made today.

This has been accomplished by the use of GRASSELERATOR 808, which we claim gives better results and higher physical properties in connection with reclaimed rubber than any other accelerator. With its use, tires formerly sold as second grade are advanced to higher grades.

We will be glad to supply data to convince you that GRASSELERATOR 808 will assist remarkably in meeting the keen competition of today.

**GRASSELLI WHITE LITHOPONE**
**R. M. Grade**
*FINE STRONG NEUTRAL*

*The*
**GRASSELLI CHEMICAL Co.**
**Rubber Service Department**
**347 MADISON AVE - - - NEW YORK**

# Strength in Crude Rubber Continues

## *Tire Manufacturing Figures that Augured Well for the Spring Demand and Rumors of Pool Operations Exert Bullish Influence*

NEW YORK, Jan. 3, 1927—The crude rubber market has been very firm during the past two weeks, as a result both of better factory support and a stronger London market. The strength of quotations was shown in the face of heavy imports, which for the first two weeks of December totaled 25,882 tons, compared with arrivals of 20,786 for the same period in November and 16,450 in October. Although decidedly unfavorable in comparison with summer months, tire manufacturing figures of the Rubber Association for October, also contributed to the firm undertone of crude rubber, as the trade had expected lower production and shipments during that usually dull month.

Reported pool operations and the expected good demand from factories during the winter and early spring months, based on the aspect of the October tire figures, imparted an advancing tendency to the whole list. Many traders regarded the shipment of 3,452,000 tires during the month preceding the start of spring dating as a most favorable forecast.

Although the market was quiet as the Christmas holidays approached, with buying interest almost totally absent, the inactivity had no untoward effect on quotations. In fact, pre-holiday covering in London was reflected in slightly higher prices in New York on futures, although near months were unaffected. Steadiness both in London and Singapore on the eve of a four-day suspension of business in these markets led to short buying in the local market, with March featured. December was also firm at 39 cents.

When business was resumed in New York on the 27th, there was little incentive to operate, as the London market was still closed. Yet the market displayed considerable strength in resisting the efforts of short interests to depress prices.

Toward the close of the last week in December prospects for an import month 5,000 or more tons under trade estimates and a steady London market held prices against a decline. Despite the increase of 1,050 tons in London stocks that market remained firm and reported few sellers. Not only London and New York, but the Singapore market was palpably under the influence of pre-holiday sentiment. On the last two days of 1926 fluctuations were small and unimportant. At the close of the year prices were on a more stable basis than has been experienced in years, a fact which traders attributed both to the Exchange and the purchasing syndicate. The latter was said to have taken a huge financial burden from the shoulders of individual rubber manufacturers and as a result, traders anticipated a steady and fairly active market throughout 1927.

### JAN. 3 OPEN MARKET PRICES

| | | | |
|---|---|---|---|
| ***Plantations—*** | | | |
| Ribbed Smoked Sheets | | | |
| Spot | .38½ | @ | .38¾ |
| January | .38½ | @ | .38¾ |
| Feb./March | .38½ | @ | .39 |
| April/June | — | @ | .39⅝ |
| First Latex, crepe spot | — | @ | .38⅞ |
| Amber Crepe, No. 2, spot | — | @ | .36¼ |
| " " No. 3 | — | @ | .35¾ |
| " " No. 4 | — | @ | .34½ |
| Brown Crepe, Rolled | — | @ | .32 |
| " " Clean, thin | — | @ | .35½ |
| " " Specky | — | @ | .33¼ |
| Liquid Latex, per gal. | 1.50 | @ | 1.75 |
| ***Pontianac—*** | | | |
| Bangermassin | — | @ | .17¼ |
| Palembang | Nominal | | |
| Prime Pressed | — | @ | .27½ |
| Sarawak | — | @ | .17¼ |
| ***Paras—*** | | | |
| Up-river Fine | .31¾ | @ | .32¼ |
| " Medium | .26½ | @ | — |
| " Coarse | .22½ | @ | — |
| Acre Bolivian, fine | .32 | @ | .33 |
| Tapajos, fine | — | @ | .29½ |
| Cut Beni Bolivian, fine | .31½ | @ | .32½ |
| ***Caucho Ball—*** | | | |
| Upper, shipment | — | @ | .23¾ |
| ***Centrals—*** | | | |
| Corinto, scrap | .21 | @ | .22 |
| Esmeraldo, sausage | Nominal | | |
| Guayule, w and d | — | @ | .31 |
| ***Africans—*** | | | |
| Benguela, No. 2 | Nominal | | |
| Congo, upper, black | Nominal | | |
| " " red | Nominal | | |
| ***Balata—*** | | | |
| Block, Columbia | Nominal | | |
| " Cuidad | .40 | @ | .42 |
| Surinam, sheet | .74 | @ | .75 |
| ***Gutta Percha—*** | | | |
| Siak | — | @ | .30½ |
| Red Macassar | 3.00 | @ | — |
| ***Chicle—*** | | | |
| Mexican, Yucatan | .65 | @ | — |

### LONDON MARKET

| Standard Ribbed Smoked Sheets—*Buyers* | |
|---|---|
| Spot | 18¾d |
| January | 18¾ |
| February | 19 |
| April/June | 19⅝ |
| July/Sept. | 20⅛ |

### SINGAPORE MARKET

| Standard Ribbed Smoked Sheets—*Sellers* | |
|---|---|
| Spot | 18¼d |
| Jan./March | 18½ |
| April/June | 18¾ |

Inventory taking kept manufacturers out of the market during the last week of December, but this fact had little effect on the cheerful sentiment that was apparent everywhere.

### RECLAIMED RUBBER

NEW YORK, Jan. 3, 1927—Reclaimed rubber has been quiet during the past two weeks, but despite the seasonable lack of large demand, prices have held steady in anticipation of an improvement during the first quarter of 1927. It is reported that reclaimers have orders for increased shipments to factories in January and this fact augurs well for a healthy business in the immediate future.

| | | | |
|---|---|---|---|
| ***High Tensile Black*** | | | |
| Super-Reclaim No. 1 lb. | .19 | @ | .20 |
| " " No. 2 lb. | .16 | @ | .17 |
| ***Shoe*** | | | |
| Unwashed lb. | .08¾ | @ | .09 |
| Washed lb. | .11¾ | @ | .12¼ |
| ***Tube*** | | | |
| No. 1 (Floating) lb. | .18 | @ | .21 |
| No. 2 (Compounded) lb. | .15½ | @ | .16½ |
| ***Tires*** | | | |
| Black, unwashed lb. | .09 | @ | .09½ |
| Black, washed lb. | .11 | @ | .11¼ |
| Black selected tires lb. | .10½ | @ | .11 |
| Dark Grey lb. | .12 | @ | .13 |
| Light Gray lb. | .12½ | @ | .13½ |
| White lb. | .17 | @ | .17½ |
| Truck, Heavy Gravity lb. | .08¾ | @ | .09½ |
| " Light Gravity lb. | .09¾ | @ | .10¼ |
| ***Miscellaneous*** | | | |
| Mechanical Blends lb. | .08 | @ | .09 |
| Red, High Grade lb. | .17 | @ | .17½ |

### SCRAP RUBBER

NEW YORK, Jan. 3, 1927—The market for scrap rubber is considerably stronger, with better demand reported from reclaimers. A contributing factor to the advance in the price of several grades is the fact that accumulations have been slow to reach scrap dealers' hands, due to bad weather in many sections of the country. Dealers are enthusiastic regarding prospects for the new year and from present indications, they say, it is likely that the first quarter will be a good one.

[*Prices to Consumer*]

| | | | |
|---|---|---|---|
| Auto tire peelings ton | 36.50 | @ | 38.00 |
| Standard White auto ton | 57.50 | @ | 60.00 |
| Mixed auto ton | 26.50 | @ | 27.50 |
| Bicycle tires ton | 25.00 | @ | 26.50 |
| Clean solid truck tires ton | 38.00 | @ | 40.00 |
| Boots and shoes | .02¼ | @ | .02⅝ |
| Arctics, untrimmed | .01⅜ | @ | .01½ |
| Arctics, trimmed | .01⅝ | @ | .01¾ |
| Tuner tubes, No. 1 | .09½ | @ | .09⅝ |
| Inner tubes, No. 2, compounded | .07¾ | @ | .08 |
| Air Brake Hose ton | 35.00 | @ | 36.50 |
| Rubber hose ton | 21.00 | @ | 23.00 |

## Closing Prices on Rubber Exchange of New York, Inc.

### DEC. 16 TO JAN. 1.

| | Dec. | Jan. | Feb. | March | April | May | June | July | Aug. | Sept. | Oct. | Nov. | SALES* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dec. 16 | 37.80 | 37.60 | 37.90 | 38.40 | 38.70 | 38.90 | 39.30 | 39.60 | 40.00 | 40.30 | 40.60 | 41.00 | 164 |
| 17 | 37.80 | 37.80 | 38.20 | 38.50 | 38.60 | 38.80 | 39.20 | 39.60 | 40.00 | 40.30 | 40.60 | 41.00 | 193 |
| 18 | 38.00 | 38.20 | 38.50 | 38.60 | 38.90 | 39.30 | 39.50 | 39.90 | 40.30 | 40.60 | 40.90 | 41.30 | 114 |
| 20 | 38.20 | 38.20 | 38.50 | 38.90 | 39.20 | 39.40 | 39.60 | 39.80 | 40.30 | 40.60 | 40.90 | 41.30 | 162 |
| 21 | 38.50 | 38.20 | 38.50 | 38.80 | 38.90 | 39.30 | 39.60 | 39.80 | 40.30 | 40.60 | 40.60 | 41.40 | 132 |
| 22 | 38.40 | 38.30 | 38.50 | 38.80 | 39.10 | 39.50 | 39.70 | 39.90 | 40.50 | 40.70 | 41.00 | 41.40 | 89 |
| 23 | 38.90 | 38.60 | 38.90 | 39.30 | 39.70 | 39.80 | 40.00 | 40.30 | 40.80 | 41.00 | 41.30 | 41.70 | 222 |
| 24 | 38.70 | 38.80 | 39.20 | 39.50 | 39.80 | 40.00 | 40.30 | 40.40 | 41.00 | 41.30 | 41.60 | 42.00 | 109 |
| 25 | Exchange closed in observance of Christmas. | | | | | | | | | | | | |
| 27 | —— | 38.60 | 39.10 | 39.40 | 39.70 | 40.10 | 40.30 | 40.60 | 41.00 | 41.30 | 41.60 | 42.00 | 37 |
| 28 | 38.50 | 39.00 | 39.30 | 39.60 | 39.70 | 40.10 | 40.50 | 40.90 | 41.20 | 41.20 | 41.40 | 42.00 | 112 |
| 29 | —— | 38.40 | 38.80 | 39.10 | 39.30 | 39.50 | 39.70 | 40.20 | 40.60 | 41.00 | 41.30 | 41.80 | 103 |
| 30 | —— | 38.50 | 38.80 | 39.10 | 39.30 | 39.70 | 39.70 | 40.30 | 40.60 | 41.00 | 41.30 | 41.80 | 119 |
| 31 | —— | 38.30 | 38.60 | 38.80 | 39.20 | 39.40 | 39.80 | 40.20 | 40.40 | 40.80 | 41.10 | 41.60 | 89 |
| Jan. 1 | Exchange closed in observance of New Year's Day. | | | | | | | | | | | | |

(*) In lots of 2½ tons each; totals are for old and new contracts.
(Prices are for new contracts)

# PARA-FLUX *A Universal Softener*

(Reg. U. S. Patent Office)

*for* TIRES, MECHANICALS, RECLAIMS *and* FRICTION TAPE

## The C. P. HALL COMPANY

118 Central Savings & Trust Bldg. AKRON, OHIO

## PEQUANOC RUBBER COMPANY

Office and Works: BUTLER, N. J.

MANUFACTURERS OF

# RECLAIMED RUBBER

WITH A REPUTATION FOR

UNIFORMITY -- RELIABILITY -- CLEANLINESS

# Aero Brand

AMERICAN CYANAMID COMPANY — AERO BRAND — PRODUCTS

## DPG
DIPHENYLGUANIDINE

## DOTG
DI-ORTHO-TOLYLGUANIDINE

Aero Brand Accelerators are made from our own air-nitrogen bases. Careful technical control of each step of the manufacturing process assures absolute uniformity of grade at over 99% pure.

Ample stocks of Aero Brand DPG and DOTG are carried at six convenient points.

AMERICAN CYANAMID COMPANY
INCORPORATED

511 Fifth Avenue New York, N. Y.

# Good Demand for Rubber Chemicals

## *Withdrawals on Contracts are Stimulated by the Fact that Rubber Plant Inventories Revealed Immediate Need of Stocks*

NEW YORK, Jan. 3, 1927—Leading chemical houses supplying the rubber factories report that orders for withdrawals on contracts during January promise a healthy business. But instead of attributing this increased demand to larger production, caused in turn by a good influx of spring dating orders, they say that inventories recently completed revealed an immediate need of stocks to take care of January production schedules. They report that if spring dating has had any appreciable effect on rubber factory production, this has not been reflected in the demand for chemicals. At the time of this writing it was not expected that business for the first quarter would compare favorably with the record high levels set during the third quarter of 1926, yet chemical factors were optimistic regarding the outlook. Much depends, they say, on the reception given by the public to new motor car models, and it is too early to make predictions in this direction.

### ACCELERATORS

*Organic*

| | | | |
|---|---|---|---|
| A-7 | lb. | .70 @ | — |
| A-40 | lb. | .70 @ | — |
| A-19 | lb. | .75 @ | — |
| A-11 | lb. | .75 @ | — |
| Aldehyde ammonia, crystals | lb. | .83 @ | — |
| Aniline oil, drums | lb. | .17 @ | .17½ |
| "BB" | lb. | 1.05 @ | 1.07 |
| Captax | lb. | 1.20 @ | 1.50 |
| Crylene | lb. | .70 @ | — |
| paste | lb. | .50 @ | — |
| Di-Ortho-Tolylguanidine | lb. | 1.08 @ | — |
| Diphenylguanidine | lb. | .85 @ | .88 |
| Ethylidene aniline | lb. | .60 @ | .65 |
| Excellerex | lb. | .35 @ | .40 |
| Formaldehyde-Aniline | lb. | .40 @ | .42 |
| Grasselerator 102 | lb. | .80 @ | .82½ |
| Grasselerator 552 | lb. | 4.80 @ | 5.00 |
| Grasselerator 808 | lb. | 1.25 @ | 1.50 |
| Heptene | lb. | .55 @ | — |
| Hexamethylene-tetramine | lb. | .80 @ | .82½ |
| Monex | lb. | 3.25 @ | — |
| Paraphenylenediamine | lb. | 1.25 @ | 1.30 |
| Piperidine-Piperidyldithio-Carbamate | lb. | 4.80 @ | 5.00 |
| R & H 50 | lb. | — @ | .65 |
| Super-Sulphur No. 1 | lb. | .50 @ | — |
| Super-Sulphur No. 2 | lb. | .18 @ | .25 |
| Tensilac, No. 41 | lb. | .65 @ | — |
| Thiocarbanilide, kegs | lb. | .28½ @ | — |
| Trimene | lb. | .75 @ | — |
| base | lb. | 1.20 @ | 1.35 |
| Triphenylguanidine | lb. | .70 @ | .73 |
| Tuads | lb. | 3.25 @ | 3.50 |
| Vulcone | lb. | .75 @ | .79 |
| Z. 88 | lb. | .75 @ | 1.00 |
| Zimate | lb. | 4.00 @ | — |

*Inorganic*

| | | | |
|---|---|---|---|
| Lead, sublimed blue | lb | .10 @ | .10½ |
| Lead, white | lb. | .10¼ @ | — |
| Litharge, domestic | lb. | .10¾ @ | — |
| Magnesia, calcined, light | lb. | .06½ @ | — |
| heavy | lb. | .04½ @ | — |

### COLORS

*Blacks* (See Compounding Materials)

*Blues*

| | | | |
|---|---|---|---|
| Prussian | lb. | .33 @ | .35 |
| Ultramarine | lb. | .08 @ | .35 |

*Browns*

| | | | |
|---|---|---|---|
| Siena, Italian | lb. | .04 @ | .08 |
| Umber, Turkey | lb. | .04 @ | .06 |

*Greens*

| | | | |
|---|---|---|---|
| Chrome, light | lb. | .27 @ | .31 |
| medium | lb. | .29 @ | .32 |
| dark | lb. | .31 @ | .34 |
| Chromium Oxide, bbl. | lb. | .31 @ | .38 |

*Reds*

| | | | |
|---|---|---|---|
| Antimony crimson, 15/17 | lb. | .27 @ | — |
| sulphur free | lb. | .48 @ | .50 |
| golden 15/17 F.S. | lb. | .16 @ | .22 |
| Indian English | lb. | .11 @ | .13 |
| Oximony | lb. | .13¼ @ | — |
| Para toner | lb. | .80 @ | .90 |
| Red oxide, reduced | lb. | .10 @ | .11 |
| pure | lb. | .14 @ | .15 |
| Toluidine toner | lb. | 1.75 @ | 1.85 |
| Venetian red | lb. | .01½ @ | .05 |
| Vermillion, quicksilver, English | lb. | 1.55 @ | 1.60 |

*Whites*

| | | | |
|---|---|---|---|
| Lithopone, Akeolith | lb. | .05¾ @ | .06 |
| Litnopone, Azolith | lb. | .05¾ @ | .06¼ |
| Zinc Oxide—American Process | | | |
| American Azo: | | | |
| ZZZ (lead free) | lb. | .07¾ @ | — |
| ZZ (under 5% leaded | lb. | .06⅝ @ | .06⅞ |
| Zinc Oxide—French Process | | | |
| White seal | lb. | .11⅝ @ | — |
| Green seal | lb. | .10⅜ @ | — |
| Red seal | lb. | .09½ @ | — |

*Yellows*

| | | | |
|---|---|---|---|
| Chrome | lb. | .17 @ | .18 |
| Ocher, French medium | lb. | .02½ @ | .02⅝ |
| domestic | lb. | .01⅝ @ | .02 |

### COMPOUNDING MATERIALS

| | | | |
|---|---|---|---|
| Aluminum Flake (f.o.b. plant) | ton | 21.85 @ | 24.50 |
| hydrate light | lb. | .16 @ | .17 |
| Ammonia carbonate | lb. | .13½ @ | .14 |
| Are-O-Sol | ton | 8.00 @ | 11.00 |
| Asbestine | ton | 16.00 @ | 18.50 |
| Barium carbonate | ton | 50.00 @ | 52.00 |
| Barium Dust | lb. | .05 @ | .06 |
| Barytes southern off-color, | ton | 12.00 @ | 18.00 |
| Western prime white | ton | 23.00 @ | — |
| imported | ton | 27.00 @ | 36.00 |
| Basofor | lb. | .04½ @ | — |
| Blacks | | | |
| Arrow "Aerfloted" | lb. | .08 @ | .12 |
| Bone Black | lb. | .05½ @ | .11 |
| Carbon, compressed | lb. | .07½ @ | .11½ |
| " uncompressed | lb. | .07 @ | .11 |
| Drop Black | lb. | .07½ @ | .14 |
| Lamp " | lb. | .12 @ | .40 |
| Micronex | lb. | .08 @ | .12 |
| Thermatomic carbon | lb. | .05 @ | — |
| Blanc fixe dry f.o.b. works | lb. | .04 @ | — |
| Carrara filler | lb. | .01¾ @ | .02 |
| Catalpo (fact.) | lb. | .02 @ | — |
| Chalk | lb. | .02½ @ | .04½ |
| Clay, China, domestic | ton | 8.00 @ | 9.00 |
| Aerfloted Suprex | ton | 10.00 @ | 20.00 |
| Blue Ridge, Dark | ton | 9.00 @ | — |
| " " Light | ton | 12.00 @ | — |
| Dixie | ton | 15.00 @ | 30.00 |
| Langford | ton | 12.00 @ | 22.00 |
| Mineral Flour, c. l. fob mine | ton | 20.00 @ | 23.00 |
| Glues, extra white | lb. | .19½ @ | .29 |
| medium white | lb. | .18 @ | .24 |
| common bone | lb. | .13 @ | .14 |
| Graphite flake, bbls. | lb. | .06½ @ | .10 |
| Magnesia, carbonate | lb. | .08 @ | .09 |
| Mica, powdered | ton | 65.00 @ | 80.00 |
| Rotton Sone (powdered) | lb. | .02½ @ | .04½ |
| Soapstone, powdered | ton | 15.00 @ | 22.00 |
| Starch, powdered | cwt. | 3.30 @ | 3.70 |
| Talc, domestic | ton | 16.00 @ | 18.00 |
| Terca Alba | cwt. | 1.15 @ | 1.75 |
| Tripoli, white | lb. | .01¾ @ | .02 |
| Whiting, commercial | cwt. | .85 @ | 1.00 |
| English cliffstone | cwt. | 1.50 @ | — |
| Quaker | ton | 13.00 @ | 15.00 |
| Superfine | ton | 10.00 @ | 12.00 |
| Sussex | ton | 8.00 @ | 10.00 |
| Wood pulp XXX | ton | 35.00 @ | — |
| " " X | ton | 25.00 @ | — |

### MINERAL RUBBER

| | | | |
|---|---|---|---|
| Genasco (factory) | ton | 50.00 @ | 52.00 |
| Granulated M.R. | ton | 33.00 @ | 38.00 |
| Hydrocarbon, Hard | ton | 28.00 @ | 34.00 |
| Hydrocarbon, Soft | ton | 28.00 @ | 34.00 |
| 320/340 M.P. hydrocarbon (c. l. factory) | ton | 47.00 @ | 52.00 |
| 300/310 M.P. hydrocarbon (c. l. factory) | ton | 42.00 @ | 47.00 |
| Paradura | ton | 70.00 @ | 72.50 |
| Robertson, MR, solid | ton | 35.00 @ | 75.00 |
| M.R. (gran) | ton | 42.00 @ | 80.00 |

### SOFTENERS

*Acids*

| | | | |
|---|---|---|---|
| Nitric, 36 degrees | cwt. | 5.00 @ | 5.25 |
| Sulphuric, 60 degrees | ton | 10.50 @ | 11.50 |
| 66 degrees | ton | 15.00 @ | 16.00 |
| Tartaric, crystals | lb. | .29½ @ | — |

*Acids, Fatty*

| | | | |
|---|---|---|---|
| Stearex | lb. | .10 @ | .14 |
| Stearic, single pressed | lb. | .10 @ | .11 |
| double pressed | lb. | .12 @ | .13 |
| triple pressed | lb. | .14 @ | .15 |

*Alkalies*

| | | | |
|---|---|---|---|
| Caustic soda, 76% | cwt. | 3.20 @ | — |
| Soda ash, 58% C.L. | cwt. | 1.43 @ | 1.45½ |

*Oils*

| | | | |
|---|---|---|---|
| Castor, No. 3 bbls. | lb. | .12 @ | — |
| Corn, crude, bbls. | lb. | .10½ @ | .11 |
| refined | lb. | .11¾ @ | — |
| Cottonseed, crude | | .06¼ @ | — |
| Cycline | gal. | .26 @ | .34 |
| Fluxrite | lb. | .05 @ | .06 |
| Glycerine, C.P. drums | lb. | .30 @ | .32 |
| Linseed, Raw C.L. bbl. | lb. | .10 @ | — |
| Moldrite | lb. | .05 @ | .06 |
| Palm Lagos | lb. | .08¼ @ | .08¾ |
| Niger | lb. | .07½ @ | .07⅝ |
| Peanut, domestic, crude | lb. | .11 @ | — |
| Petrolatum, white | lb. | .09 @ | .09½ |
| amber | lb. | .03¾ @ | .04 |
| dark amber | lb. | .03¾ @ | .03½ |
| Pine, steam distilled | lb. | .70 @ | .72 |
| Rapeseed, refined | gal. | .77 @ | .85 |
| Rosin, first rectified | gal. | .70 @ | — |
| second rectified | gal. | .75 @ | — |
| Synthecite | lb. | .06 @ | — |
| Tar, commercial | gal. | .30 @ | .32 |

*Resins and Pitches*

| | | | |
|---|---|---|---|
| Pitch, Burgundy | lb. | .06½ @ | .07½ |
| coal tar | gal. | .05½ @ | .06 |
| pine | bbl. | 9.00 @ | 10.00 |
| Rosin, grade K | bbl. | 14.00 @ | — |
| Pigmentar | gal. | .33 @ | .41 |
| Tar Retort | bbl. | 16.00 @ | 16.50 |
| kiln burned | bbl. | 15.50 @ | 16.00 |

*Solvents*

| | | | |
|---|---|---|---|
| Acetone, pure | lb. | .12 @ | — |
| Alcohol denatured, No. 1 bbls. | gal. | .40 @ | — |
| Benzol, 90% | gal. | .24 @ | — |
| pure | | .29 @ | — |
| Carbon bisulphide | lb. | .05½ @ | .06¼ |
| Turpentine, spirits | gal. | .89½ @ | .90 |
| Motor gasoline, steel bbls. | gal. | .21 @ | — |
| Naptha, V. M. & P. | gal. | .16½ @ | — |
| Turpentine, spirits | gal. | .89½ @ | .90 |
| wood | gal. | .84 @ | .88 |

*Waxes*

| | | | |
|---|---|---|---|
| Beeswax | lb. | .40 @ | .41 |
| Carnauba, No. 1 | lb. | .75 @ | — |
| Ceresin, white | lb. | .10 @ | .11 |
| Montan, crude | lb. | .06 @ | .06½ |
| Ozokerite, black | lb. | .24 @ | .25 |
| green | lb. | .26 @ | .30 |

### ANTI-OXIDANTS

| | | | |
|---|---|---|---|
| Age-Rite | lb. | .85 @ | .90 |
| Antox | lb. | .88 @ | — |
| VGB | lb. | .66 @ | — |

### SUBSTITUTES

| | | | |
|---|---|---|---|
| Black | lb. | .08½ @ | .14 |
| White | lb. | .10 @ | .17 |
| Brown | lb. | .10 @ | .15 |

### VULCANIZING INGREDIENTS

| | | | |
|---|---|---|---|
| Ethyl Chloride, Cyl. | lb. | .55 @ | — |
| " " Drums | lb. | .45 @ | — |
| Sulphur Chloride (drums) | lb. | .04 @ | .05 |
| Sulphur flour | | | |
| Superfine, bags | cwt. | 2.20 @ | 2.80 |
| " bbls. | cwt. | 2.25 @ | 3.10 |
| 100% pure, refined, bags | cwt. | 2.60 @ | 3.15 |
| bbls. | cwt. | 2.95 @ | 3.50 |

SINCE 1880

Rand

GUARANTEED

RUBBER GOODS

"They Last Longer"

Reg. U. S. Patent Office

RANDPRINT APRONS

| | |
|---|---|
| Dress Shields | Guimps and Brassieres |
| Rubber Sheetings | Rubber Aprons |
| Bunny Baby Pants | Pure Rubber Sheets |
| Sanitary Aprons | Rubber Bibs |
| Sanitary Elastic Belts | Crib Sheets |
| Sanitary Bloomers | Bathing Caps |
| Sanitary Stepins | Rubber Specialties |
| Powder Puff Pockets | Rubberized Sheeting |
| Rubber Gloves | Hot Water Bottles |

RANDPRINT RUBBER

SHEET GUM cut to pattern for manufacturers.

*Special Goods To Order*

Made by

RAND RUBBER CO., INC.

Formerly Brooklyn Shield & Rubber Co.

Sumner Ave. & Halsey St., Brooklyn, N. Y., U. S. A.

H. MUEHLSTEIN & COMPANY, Inc.

CRUDE AND SCRAP

RUBBER

*"For Service"*

NEW YORK - 41 East 42nd St.
AKRON - 1111 Akron Savings & Loan Building
CHICAGO - 327 S. La Salle St.
BOSTON - 176 Federal St.
LOS ANGELES - 728 South Hill Street

*WAREHOUSES:* Jersey City, N. J. and Akron, Ohio

THE I. B. KLEINERT RUBBER CO.

*is Headquarters for*

| | | |
|---|---|---|
| Dress Shields | Reducing Garments | Powder Puff Pockets |
| Guimpes | Rubber Sheetings | Tourist Cases |
| Baby Pants | Hose Supporters | Bibs |
| Crib Sheets | Household Aprons | Dress Protectors |
| Bathing Caps | Shirtastic Ribbon | Sanitary Goods |

GUARANTEED Kleinerts

REG. U. S. PAT. OFF.

I. B. KLEINERT RUBBER CO., 485 Fifth Avenue, New York

AKRON-WILLIAMS A-W PRODUCTS

Heater Presses
Molds and Cores
Tubing Machines

THE WILLIAMS FOUNDRY & MACHINE CO.

"In Business Since 1888"

AKRON, OHIO

Est. 1900 Inc. 1919

THE KUHLKE MACHINE CO.

Formerly Jones & Kuhlke

AUTOMOBILE TIRE MOLDS and CORES

GENERAL MACHINE WORK

Akron, Ohio

The CARTER BELL MFG CO

CARTER BELL STANDARD SINCE 1903 RUBBER SUBSTITUTES

150 Nassau Street New York

# Cotton Continues Rise on Good Demand

## *Small Ginnings and Active Liquidation of January Position Cause only Momentary Decline and Market Resumes Advance*

NEW YORK, Jan. 3, 1927—Cotton resumed its advancing tendency about the middle of December, due largely to bad weather and covering by short interests, and despite momentary halts, continued strong until the 20th when prices sank on the Census Bureau's report of 15,542,000 bales ginned up to Dec. 13. This was only about 710,000 bales above 1925 ginnings up to the same date. As a result, prices fell 22 to 23 points, ending barely steady, with a net decline of a few points.

After its setback the market steadied the next day within narrow trading limits, December advancing 24 points to a quotation 55 points over January, and this premium rose 10 points more the following day when December sold at 13.08. A feature of trading was active liquidation of the January position before issuance of notices on the 27th. The position was sold and replaced with March, May, July or October, but the market disappointed the shorts on Christmas Eve when a further gain of from 4 to 10 points was recorded.

Although January notices were estimated at 100,000 to 110,000 bales, the market advanced 28 points on that position, or nearly $1.50 a bale. The notices failed to have the depressing effect under the Lever law they would have had under the old regulations. The bad weather over the holidays had its effect in helping to strengthen prices, as it gave rise to renewed fears for the remainder of the crop still unharvested.

The rise in cotton since Dec. 4 was sharp. Up to the 28th, January had risen from 11.55 to 12.72, an advance of 117 points; March from 11.80 to 12.90, or 110 points; May from 12.02 to 13.08, or 106 points; July from 12.25 to 13.28, or 103 points; and October from 12.46 to 13.40, or 94 points. After a small decline on the 28th, cotton was in demand the next day, with a rise of 12 to 17 points recorded.

Although trading was small toward the close of the year and the weather was better, the market was steady, but a moderate reaction set in on the 31st, declining 6 to 16 points. Greater interest was shown by mills and there was more mill calling than hedge selling in the last two business days of 1926. The weather will probably be the most potent factor in fluctuations in the immediate future.

## *Current* COTTON and FABRIC *Quotations*

### COTTON CLOSING PRICES

| | Open | High | Low | Close Jan. 3 | Close Dec. 15 |
|---|---|---|---|---|---|
| January | 12.60 | 12.60 | 12.50 | 12.50 | 12.25 |
| March | 12.78 | 12.79 | 12.69 | 12.70 | 12.51 |
| May | 12.06 | 12.98 | 12.88 | 12.88 | 12.70 |
| July | 13.12 | 13.13 | 13.04 | 13.05 | 12.88 |
| October | 13.28 | 13.29 | 13.22 | 13.22 | 13.10 |

### TIRE FABRICS

CORD

| | | | |
|---|---|---|---|
| Peeler, carded, 23/5/3 | lb. | .37 @ | .38 |
| Peeler, carded, 23/4/3 | lb. | .34 @ | .35 |
| Peeler, carded, 15/3/3 | lb. | .39 @ | .40 |
| Peeler, carded 13/3/3 | lb. | .38 @ | .40 |
| Egyptian, carded, 23/5/3 | lb. | .44 @ | .46 |
| Egyptian, combed, 23/5/3 | lb. | .50 @ | .52 |

SQUARE WOVEN

| | | | |
|---|---|---|---|
| Carded American, 17¼ oz. 23-11 ply | lb. | .36½ @ | .37½ |
| Carded American, 17¼ oz. 10-5 ply | | .33 @ | .34 |

LENO BREAKER

| | | | |
|---|---|---|---|
| Carded American, 8 oz. | lb. | .35 @ | .37 |
| Carded American, 10 oz. | lb. | .35 @ | .37 |

CHAFERS

| | | | |
|---|---|---|---|
| Carded American, 8¼ oz. | lb. | .33 @ | — |
| Carded American, 9½ oz. | lb. | .33½ @ | — |
| Carded American, 12 oz. | lb. | .33 @ | — |
| Carded American, 14 oz. | lb. | .32 @ | — |

### SHEETINGS

| | | | |
|---|---|---|---|
| 40-inch 2.50-yard | yd. | .10½ @ | — |
| 40-inch 2.85-yard | yd. | .09¼ @ | .09½ |
| 40-inch 3.15-yard | yd. | .10½ @ | — |
| 40-inch 3.60-yard | yd. | .08¾ @ | — |
| 40-inch 3.75-yard | yd. | .07½ @ | .07⅝ |
| 40-inch 4.25-yard | yd. | .06¾ @ | .07 |

### DUCKS

| | | | |
|---|---|---|---|
| Belting and Hose | lb. | .27¼ @ | .27½ |
| Enameling | lb. | .30 @ | .34 |
| Shoe Ducks | lb. | .33 @ | .35 |
| Single filling | lb. | .12 @ | .14½ |
| Double filling | lb. | .14¾ @ | .16 |

### Tire Fabrics

Much better interest has been displayed by factories in tire fabrics during the last two weeks. Many of the rubber companies inquired for fairly large quantities, and some of the business was quietly placed. Smaller orders, varying between 100,000 and 250,000 pounds, were also placed for covering immediate requirements. Carded peeler cords and chafer fabrics were in the greatest demand, with emphasis placed on cords that were the full thirteen pounds breaking strength. Few of the tire factories are fully covered for second quarter operations, and mills and factors have been keeping in close touch with these customers in the hope that additional commitments be placed shortly. Most of the tire fabric mills report that they are fairly well sold up for the first four months of 1927.

### Sheetings

Sales of sheetings during the past fortnight were mostly confined to filling-in lots, on which concessions were granted for immediate deliveries. Mills held 40-inch 2.50-yard at from 10½ to 10¾ cents and 40-inch 2.85-yard at from 9⅜ to 9¼ cents; with tinged lots of the latter selling at 9 cents. Although some of the orders placed were for quantities ranging from 15,000 to 25,000 yards, most of the sales involved smaller quantities. Prices held firm and low bids were refused.

### Ducks

Buyers found an incentive to cover part of their future requirements in the knowledge that factors were ready to shade asking prices on good-sized quantities. Producers seemed particularly interested in disposing of odds and ends of special constructions. There was little change in quoted prices, as mills seemed to prefer to handle their inquiries on the basis of size. Single filling duck was held for 14 cents for grade A and 12 cents for B. A good deal more business on these constructions was said to be required to keep looms fully occupied.

J. H. LANE & CO.

Tire Fabrics Cord Fabrics

Enameling Duck Drill Sheeting

Osnaburg and Special Constructions

250 W. 57 Street, NEW YORK 323 South Franklin St., CHICAGO

FISK
TIRES

# *FISK TIRES*

## For All Transportation Needs

*From the Ford Runabout to the Heaviest truck and Multiple Passenger Coach.*

Executive Offices—Fisk Building, New York City.
Commercial Offices—Chicopee Falls, Mass.

# STATISTICAL SECTION

TIRES & TUBES
CRUDE RUBBER

AUTOMOBILES
GASOLINE

THE LARGE imports of crude rubber during the month of November and the early part of December have undoubtedly kept crude rubber prices down. As may be seen from the table at the bottom of this page, United States imports during November of 38,925 tons were the largest of any month since last March. Disregarding the last week of December, which had a good effect in raising it, the average price of ribbed smoked sheets in London thus far this restriction quarter has shown no improvement. Compared with an average price of 18.795 pence reported in our last issue, the average declined 0.025 pence. The average for the quarter of 18.770 computed by THE RUBBER AGE compares with an official London average on Dec. 30 of 19.176, against an average of 19.200 on Dec. 22. The discrepancy arises from the fact that the official average is figured from prices taken at various periods, each day, while the one shown below is based on closing prices.

## Average Spot Closing Prices--Ribbed Smoked Sheets

*(New York Market)*

### Average Price per Pound for Years 1910-1920

| *Year* | *Cents* | *Year* | *Cents* | *Years* | *Cents* |
|---|---|---|---|---|---|
| 1910 | 206.60 | 1914 | 65.33 | 1918 | 60.15 |
| 1911 | 141.30 | 1915 | 65.85 | 1919 | 48.70 |
| 1912 | 121.60 | 1916 | 72.50 | 1920 | 36.30 |
| 1913 | 82.04 | 1917 | 72.23 | | |

### Average Monthly Price per Pound since 1921

| *Months* | 1921 *Cents* | 1922 *Cents* | 1923 *Cents* | 1924 *Cents* | 1925 *Cents* | 1926 *Cents* |
|---|---|---|---|---|---|---|
| Jan. | 19.18 | 18.82 | 32.73 | 25.86 | 36.71 | 79.50 |
| Feb. | 17.96 | 16.12 | 35.14 | 25.29 | 36.01 | 62.25 |
| Mar. | 17.05 | 14.53 | 34.21 | 22.83 | 41.00 | 59.00 |
| Apr. | 16.73 | 15.99 | 32.48 | 22.51 | 43.64 | 51.25 |
| May | 15.82 | 15.25 | 27.39 | 19.89 | 58.47 | 47.75 |
| June | 12.49 | 15.11 | 26.88 | 18.81 | 77.26 | 42.50 |
| July | 14.01 | 14.67 | 26.10 | 22.16 | 103.16 | 41.03 |
| Aug. | 14.04 | 13.93 | 28.84 | 26.17 | 82.99 | 38.50 |
| Sept. | 14.53 | 14.44 | 28.95 | 27.56 | 88.88 | 41.00 |
| Oct. | 16.02 | 19.78 | 26.93 | 31.13 | 98.01 | 42.50 |
| Nov. | 18.06 | 23.88 | 27.14 | 34.33 | 104.80 | 38.50 |
| Dec. | 20.47 | 27.42 | 26.60 | 37.88 | 98.51 | |
| Average for Year | 16.36 | 17.50 | 29.45 | 26.20 | 72.46 | |

## London Closing Prices of Ribbed Smoked Sheet

*(In pence per pound)*

### Fifth Restriction Year—First Quarter

| *Day* | *Nov.* | *Dec.* | *Jan.* | *Day* | *Nov.* | *Dec.* | *Jan.* |
|---|---|---|---|---|---|---|---|
| 1 | 20⅜ | 18⅝ | | 16 | 20⅜ | 18⅝ | |
| 2 | 19½ | 17⅞ | | 17 | 20¼ | 18⅝ | |
| 3 | 19⅞ | 18¾ | | 18 | 19⅞ | 18½ | |
| 4 | 20 | 18½ | | 19 | 19½ | — | |
| 5 | 20⅜ | — | | 20 | 19½ | 18⅝ | |
| 6 | 20½ | 18⅛ | | 21 | — | 18¾ | |
| 7 | — | 18¼ | | 22 | 19⅜ | 18⅞ | |
| 8 | 20⅝ | 18⅜ | | 23 | 19⅛ | 18⅞ | |
| 9 | 20¾ | 18¼ | | 24 | 19¼ | — | |
| 10 | 20¾ | 18¼ | | 25 | 19⅛ | — | |
| 11 | 20¾ | 18¼ | | 26 | 19⅛ | — | |
| 12 | 20⅝ | — | | 27 | 19 | 19 | |
| 13 | 20½ | 18⅜ | | 28 | — | 19 | |
| 14 | — | 18½ | | 29 | 18⅝ | 18⅞ | |
| 15 | 20¼ | 18¼ | | 30 | 18½ | 19 | |
| | | | | 31 | — | 19 | |

(The average price for the period for which daily prices are reported above is approximately 18.770 pence. The British Colonial Secretary has announced that only 70% of the standard production will be exportable from the restricted area during the next quarter if the price during the entire current quarter does not average at least 21 pence.)

### Average Price in Previous Quarters

| *Quarter* | 1922-23 | 1923-24 | 1924-25 | 1925-26 |
|---|---|---|---|---|
| Nov-Jan | 14.285 | 14.175 | 17.9983 | 46.709 |
| Feb-Apr | 16.858 | 12.917 | 19.356 | 28.103 |
| May-June | 14.242 | 10.974 | 38.469 | 21.001 |
| Aug.-Oct. | 14.944 | 14.632 | 43.269 | 20.199 |

## U. S. Imports and Exports of Crude Rubber.

| | Gross Imports | | | Re-exports | | | Net Imports |
|---|---|---|---|---|---|---|---|
| YEARS | *Long Tons* | *Total Declared Value* | *Average Declared Value per pound Cents* | *Long Tons* | *Total Declared Value* | *Average Declared Value per pound Cents* | *Long Tons* |
| 1900 | 22,026 | $28,577,789 | 57.92 | 1,718 | $2,839,668 | 73.77 | 20,308 |
| 1901 | 24,617 | 28,120,218 | 51.00 | 1,663 | 2,425,727 | 65.11 | 22,954 |
| 1902 | 22,702 | 25,158,591 | 49.47 | 1,457 | 1,877,698 | 57.52 | 21,245 |
| 1903 | 24,886 | 35,152,642 | 63.06 | 1,646 | 2,598,416 | 70.47 | 23,240 |
| 1904 | 27,629 | 43,784,297 | 70.75 | 1,540 | 2,749,234 | 79.70 | 26,089 |
| 1905 | 28,637 | 48,517,906 | 75.63 | 1,616 | 3,149,989 | 87.00 | 27,021 |
| 1906 | 30,316 | 53,391,137 | 78.62 | 1,676 | 3,153,775 | 84.02 | 28,640 |
| 1907 | 30,649 | 49,813,361 | 72.56 | 1,832 | 3,509,903 | 85.55 | 28,817 |
| 1908 | 34,058 | 44,696,526 | 58.59 | 1,655 | 2,466,428 | 66.52 | 32,403 |
| 1909 | 41,950 | 79,264,817 | 84.35 | 2,161 | 4,233,921 | 87.46 | 39,789 |
| 1910 | 40,241 | 98,007,295 | 108.73 | 2,749 | 8,134,064 | 132.07 | 37,494 |
| 1911 | 36,987 | 74,410,550 | 89.81 | 2,523 | 4,977,174 | 88.07 | 34,464 |
| 1912 | 52,705 | 99,567,071 | 84.34 | 2,456 | 4,692,262 | 85.31 | 50,249 |
| 1913 | 51,732 | 76,820,739 | 66.29 | 1,881 | 3,396,429 | 80.62 | 49,851 |
| 1914 | 63,868 | 70,472,704 | 49.26 | 2,618 | 3,244,346 | 55.32 | 61,250 |
| 1915 | 98,876 | 111,031,144 | 50.13 | 2,082 | 2,357,350 | 50.54 | 96,794 |
| 1916 | 120,576 | 159,745,475 | 59.15 | 4,098 | 5,330,100 | 58.07 | 116,478 |
| 1917 | 181,089 | 233,220,904 | 57.49 | 4,000 | 5,305,289 | 59.21 | 117,089 |
| 1918 | 145,518 | 146,378,313 | 44.91 | 2,746 | 3,133,622 | 50.95 | 142,772 |
| 1919 | 239,259 | 215,820,113 | 40.27 | 2,282 | 2,205,629 | 43.15 | 236,977 |
| 1920 | 252,922 | 242,795,775 | 42.86 | 4,160 | 2,846,898 | 30.55 | 248,762 |
| 1921 | 185,394 | 73,772,677 | 17.76 | 5,716 | 2,414,924 | 18.86 | 179,678 |
| 1922 | 301,076 | 101,843,188 | 15.10 | 4,809 | 1,921,828 | 17.84 | 296,267 |
| 1923 | 309,144 | 185,060,304 | 26.72 | 8,772 | 5,672,319 | 28.87 | 300,373 |
| 1924 | 328,056 | 174,231,331 | 23.71 | 10,309 | 6,057,637 | 26.23 | 317,747 |
| *1925:* | | | | | | | |
| Jan. | 32,898 | 22,406,756 | 30.41 | 1,162 | 968,593 | 37.02 | 31,736 |
| Feb. | 24,696 | 18,532,115 | 33.50 | 979 | 779,406 | 35.53 | 23,717 |
| Mar. | 33,073 | 25,146,691 | 33.94 | 1,345 | 1,105,119 | 36.69 | 31,727 |
| Apr. | 32,506 | 24,874,562 | 34.16 | 1,130 | 1,009,305 | 39.86 | 31,376 |
| May | 36,932 | 30,311,754 | 36.64 | 1,203 | 1,323,445 | 49.13 | 35,729 |
| June | 31,569 | 26,855,883 | 37.98 | 1,198 | 1,577,106 | 58.75 | 30,371 |
| July | 32,455 | 33,701,723 | 46.36 | 1,278 | 2,132,681 | 74.52 | 31,177 |
| Aug. | 35,412 | 39,834,348 | 53.22 | 1,131 | 1,623,258 | 64.08 | 32,281 |
| Sept. | 26,867 | 36,686,013 | 62.11 | 1,154 | 1,820,860 | 70.41 | 25,213 |
| Oct. | 34,651 | 50,027,338 | 64.45 | 1,132 | 1,989,291 | 78.43 | 33,519 |
| Nov. | 37,755 | 56,271,963 | 66.54 | 1,605 | 2,898,930 | 80.65 | 36,150 |
| Dec. | 40,329 | 65,055,868 | 72.02 | 1,510 | 3,625,259 | 77.61 | 38,819 |
| | 396,642 | 429,705,014 | 48.36 | 14,827 | 19,847,753 | 59.76 | 381,815 |
| *1926:* | | | | | | | |
| Jan. | 42,404 | 72,528,151 | 76.36 | 2,084 | 3,747,505 | 80.28 | 40,320 |
| Feb. | 32,865 | 58,733,370 | 79.78 | 1,430 | 2,280,168 | 71.17 | 31,435 |
| Mar. | 42,152 | 70,589,581 | 74.76 | 1,836 | 2,735,284 | 66.51 | 40,316 |
| Apr. | 34,544 | 48,742,539 | 62.99 | 1,128 | 1,605,093 | 63.58 | 33,416 |
| May | 29,756 | 36,896,080 | 55.35 | 1,052 | 1,558,987 | 66.17 | 28,704 |
| June | 24,900 | 34,498,561 | 61.85 | 1,105 | 1,371,217 | 55.41 | 23,795 |
| July | 35,820 | 33,061,470 | 41.20 | 1,554 | 1,743,854 | 50.09 | 34,266 |
| Aug. | 27,400 | 24,670,752 | 40.21 | 1,318 | 1,389,568 | 45.38 | 26,082 |
| Sept. | 37,112 | 32,625,082 | 39.02 | 1,437 | 1,519,870 | 47.20 | 35,675 |
| Oct. | 29,333 | 25,300,483 | 38.50 | 1,366 | 1,316,270 | 43.02 | 27,967 |
| Nov. | 38,925 | 34,661,631 | 39.97 | 1,482 | 3,320,461 | 42.00 | 37,443 |
| Dec. | | | | | | | |

# United States Tire and Tube Statistics[1]

## Production, Sales, and Inventories[2]

### AUTOMOBILE CASINGS

| | Production During Month | | | | | Sales During Month | | | | | Inventory at End of Month | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1922 | 1923 | 1924 | 1925 | 1926 | 1922 | 1923 | 1924 | 1925 | 1926 | 1922 | 1923 | 1924 | 1925 | 1926 |
| Jan. | 1,740 | 4,170 | 4,294 | 4,740 | 4,721 | 2,194 | 4,114 | 3,785 | 4,013 | 2,974 | 5,566 | 6,261 | 6,411 | 7,949 | 9,947 |
| Feb. | 2,779 | 4,291 | 4,372 | 4,908 | 4,865 | 2,144 | 3,568 | 3,849 | 3,924 | 3,436 | 6,255 | 6,966 | 7,020 | 8,928 | 11,164 |
| Mar. | 3,528 | 5,154 | 4,570 | 5,276 | 5,456 | 2,847 | 4,570 | 3,988 | 4,657 | 4,561 | 6,911 | 7,561 | 7,684 | 9,510 | 12,004 |
| Apr. | 3,202 | 4,719 | 4,410 | 5,341 | 5,346 | 2,853 | 4,106 | 4,018 | 5,498 | 4,980 | 7,286 | 8,118 | 8,219 | 9,088 | 12,461 |
| May | 3,629 | 4,880 | 4,051 | 5,467 | 5,023 | 3,608 | 3,793 | 3,693 | 5,954 | 5,211 | 7,364 | 9,209 | 8,442 | 8,611 | 12,343 |
| June | 3,785 | 3,943 | 3,506 | 5,418 | 5,422 | 4,281 | 3,448 | 3,671 | 6,737 | 5,724 | 6,723 | 9,387 | 8,207 | 7,243 | 11,968 |
| July | 3,302 | 2,657 | 3,403 | 5,587 | 4,950 | 3,678 | 3,463 | 4,748 | 6,298 | 6,337 | 6,445 | 8,628 | 6,851 | 6,421 | 10,592 |
| Aug. | 3,874 | 3,141 | 4,313 | 5,607 | 5,872 | 4,153 | 3,803 | 5,010 | 4,760 | 6,944 | 6,173 | 8,078 | 5,969 | 7,261 | 9,732 |
| Sept. | 3,340 | 2,706 | 4,708 | 5,007 | 5,706 | 3,407 | 3,563 | 4,539 | 4,569 | 6,040 | 6,149 | 7,197 | 6,033 | 7,681 | 9,318 |
| Oct. | 3,566 | 3,148 | 5,169 | 4,505 | 5,103 | 3,534 | 3,821 | 4,196 | 5,580 | 4,544 | 6,244 | 6,502 | 7,118 | 6,670 | 9,917 |
| Nov. | 3,644 | 3,200 | 4,253 | 4,229 | | 3,248 | 3,408 | 4,480 | 3,671 | | 6,620 | 6,252 | 6,943 | 6,955 | |
| Dec. | 3,548 | 3,250 | 4,584 | 4,760 | | 4,040 | 3,547 | 4,143 | 3,601 | | 6,132 | 5,772 | 7,427 | 8,142 | |
| | 40,932 | 45,259 | 51,633 | 60,845 | | 39,987 | 45,204 | 50,120 | 59,262 | | | | | | |

### AUTOMOBILE INNER TUBES

| | Production During Month | | | | | Sales During Month | | | | | Inventory at End of Month | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1922 | 1923 | 1924 | 1925 | 1926 | 1922 | 1923 | 1924 | 1925 | 1926 | 1922 | 1923 | 1924 | 1925 | 1926 |
| Jan. | 3,125 | 5,269 | 5,184 | 6,343 | 6,809 | 2,552 | 5,091 | 4,723 | 5,576 | 3,723 | 6,996 | 7,784 | 8,960 | 11,570 | 14,361 |
| Feb. | 3,462 | 5,386 | 5,424 | 6,339 | 6,825 | 2,310 | 4,085 | 4,530 | 4,971 | 3,736 | 8,189 | 9,029 | 9,786 | 13,023 | 17,090 |
| Mar. | 4,023 | 6,501 | 5,625 | 7,000 | 7,030 | 2,848 | 5,214 | 4,667 | 5,711 | 4,987 | 9,321 | 10,321 | 10,877 | 14,256 | 19,181 |
| Apr. | 3,534 | 5,679 | 5,380 | 6,851 | 6,554 | 3,162 | 4,825 | 4,782 | 6,704 | 5,051 | 9,640 | 11,192 | 11,503 | 13,618 | 20,674 |
| May | 3,961 | 5,757 | 4,992 | 6,846 | 6,149 | 3,995 | 4,651 | 4,865 | 8,040 | 6,304 | 9,586 | 12,390 | 11,682 | 12,501 | 21,141 |
| June | 4,174 | 4,787 | 4,658 | 6,942 | 6,171 | 5,391 | 4,882 | 5,286 | 9,032 | 6,898 | 8,249 | 11,899 | 10,888 | 10,409 | 20,243 |
| July | 4,091 | 3,500 | 5,143 | 7,544 | 5,729 | 4,905 | 5,374 | 7,190 | 9,140 | 8,569 | 7,568 | 9,862 | 8,845 | 8,635 | 17,267 |
| Aug. | 5,078 | 4,771 | 6,688 | 7,618 | 7,424 | 5,733 | 5,800 | 7,493 | 6,923 | 9,579 | 6,943 | 9,267 | 7,678 | 9,271 | 15,462 |
| Sept. | 4,669 | 4,339 | 7,342 | 7,254 | 7,590 | 4,797 | 4,966 | 6,908 | 6,665 | 7,762 | 6,886 | 8,610 | 8,052 | 9,950 | 15,312 |
| Oct. | 5,050 | 5,140 | 7,861 | 6,612 | 6,208 | 4,618 | 4,848 | 5,700 | 7,845 | 5,474 | 7,317 | 9,198 | 9,803 | 8,726 | 15,929 |
| Nov. | 5,135 | 4,602 | 6,136 | 6,266 | | 4,165 | 4,604 | 6,332 | 5,406 | | 8,280 | 8,925 | 10,224 | 9,491 | |
| Dec. | 4,548 | 4,385 | 6,273 | 6,999 | | 5,197 | 4,732 | 5,540 | 4,991 | | 7,643 | 8,425 | 11,052 | 11,313 | |
| | 50,850 | 60,116 | 70,706 | 82,614 | | 49,673 | 59,072 | 68,016 | 81,004 | | | | | | |

(1) *Statistics of The Rubber Association of America, raised to 100%.* (2) *All figures expressed in thousands.*

# Stock of Crude Rubber in United States and London

*(All Quantities in Long Tons)*

## UNITED STATES

| At End of | ON HAND | | | AFLOAT | | | ON HAND AND AFLOAT | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1924 | 1925 | 1926 | 1924 | 1925 | 1926 | 1924 | 1925 | 1926 |
| Jan. | —— | 60,870 | 55,198 | —— | 36,759 | 46,296 | —— | 97,629 | 100,434 |
| Feb. | —— | 54,109 | 58,035 | —— | 41,475 | 46,935 | —— | 95,584 | 104,970 |
| Mar. | —— | 52,494 | 61,822 | —— | 40,577 | 43,567 | —— | 93,071 | 105,389 |
| Apr. | —— | 50,143 | 55,261 | —— | 53,465 | 41,905 | —— | 103,608 | 97,166 |
| May | —— | 52,064 | 64,360 | —— | 46,846 | 40,303 | —— | 98,910 | 104,663 |
| June | —— | 50,997 | 60,460 | —— | 51,202 | 40,907 | —— | 102,199 | 101,367 |
| July | —— | 46,245 | 64,900 | —— | 46,003 | 38,062 | —— | 92,248 | 102,962 |
| Aug. | —— | 42,354 | 60,870 | —— | 41,254 | 37,360 | —— | 83,608 | 98,230 |
| Sept. | —— | 36,367 | 62,078 | —— | 55,151 | 42,464 | —— | 91,518 | 105,542 |
| Oct. | 55,378 | 34,085 | 64,989 | 46,359 | 51,098 | 52,930 | 101,737 | 85,183 | 117,919 |
| Nov. | 59,017 | 34,885 | 69,385 | 35,685 | 42,692 | 47,311 | 94,702 | 86,577 | 116,696 |
| Dec. | 56,080 | 51,215 | | 46,216 | 48,208 | | 102,296 | 99,423 | |

(Rubber Association of America figures raised to 100%.)

## LONDON

*(In Wharves and Warehouses—Figures Include Latex)*

| At End of: | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 |
|---|---|---|---|---|---|---|---|
| January | 19,300 | 56,573 | 67,252 | 73,498 | 57,460 | 27,172 | 9,994 |
| February | 18,329 | 59,439 | 67,623 | 70,483 | 56,732 | 23,425 | 10,004 |
| March | 18,969 | 63,913 | 66,670 | 63,438 | 55,647 | 18,104 | 13,750 |
| April | 20,072 | 68,759 | 68,637 | 58,770 | 54,559 | 12,949 | 18,951 |
| May | 20,921 | 70,403 | 70,146 | 54,439 | 51,615 | 5,895 | 20,896 |
| June | 22,517 | 69,408 | 71,597 | 51,050 | 51,115 | 5,318 | 23,894 |
| July | 25,346 | 71,065 | 71,515 | 49,937 | 52,073 | 4,258 | 27,727 |
| August | 30,674 | 73,211 | 72,112 | 48,427 | 49,700 | 4,619 | 30,764 |
| September | 35,504 | 72,175 | 70,977 | 54,523 | 44,011 | 5,453 | 35,077 |
| October | 41,743 | 69,229 | 68,536 | 58,891 | 37,523 | 5,086 | 42,141 |
| November | 45,550 | 70,786 | 68,548 | 60,074 | 33,593 | 3,869 | |
| December | 50,652 | 69,792 | 72,299 | 60,246 | 29,488 | 5,697 | |

# United States Consumption of Gasoline

*(Gallons)*

| MONTHS: | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 |
|---|---|---|---|---|---|---|---|---|---|
| January | 144,579,291 | 169,240,627 | 236,073,140 | 294,750,791 | 282,717,148 | 456,967,163 | 500,420,689 | 595,413,000 | 720,358,000 |
| February | 147,204,377 | 185,900,192 | 248,395,214 | 225,195,372 | 262,925,732 | 380,093,070 | 402,703,876 | 543,640,000 | 650,718,000 |
| March | 219,333,317 | 201,004,317 | 256,020,539 | 346,164,546 | 380,406,778 | 446,460,208 | 467,181,088 | 625,053,000 | 779,571,000 |
| April | 265,151,411 | 243,440,615 | 297,000,463 | 333,290,921 | 385,230,994 | 485,716,788 | 607,175,026 | 798,305,000 | 831,410,000 |
| May | 313,824,603 | 327,610,273 | 378,912,692 | 354,263,486 | 499,724,405 | 582,535,781 | 672,495,321 | 841,787,000 | 989,857,000 |
| June | 306,677,723 | 305,960,438 | 427,747,291 | 442,924,973 | 506,959,446 | 633,504,590 | 682,409,140 | 868,350,000 | 969,051,000 |
| July | 353,589,555 | 396,242,260 | 434,878,617 | 457,758,078 | 566,099,329 | 674,019,467 | 789,666,590 | 963,071,000 | 1,014,804,000 |
| August | 339,435,744 | 376,484,274 | 479,741,391 | 505,035,827 | 583,687,932 | 692,154,000 | 828,057,347 | 931,901,000 | 1,103,844,000 |
| September | 284,685,213 | 367,633,742 | 450,888,670 | 438,083,634 | 507,924,207 | 655,797,616 | 718,068,623 | 848,867,000 | 942,858,000 |
| October | 299,642,892 | 338,429,709 | 384,802,246 | 454,995,551 | 490,393,454 | 621,172,668 | 751,499,199 | 831,774,000 | 986,496,000 |
| November | 245,278,844 | 284,620,809 | 366,567,344 | 350,548,481 | 471,616,103 | 538,308,809 | 698,359,199 | 757,744,000 | 850,122,000 |
| December | 209,863,377 | 238,245,230 | 289,673,556 | 313,015,596 | 434,399,514 | 518,305,120 | 657,967,000 | 759,699,000 | |
| TOTAL | 3,129,266,347 | 3,434,813,486 | 4,250,696,163 | 4,516,027,256 | 5,372,085,042 | 6,685,035,280 | 7,770,238,000 | 9,385,604,000 | |

# The Market Place

**WHERE TO OBTAIN**

**Machinery, fabrics, chemicals, compounding ingredients, crude and reclaimed rubber, consulting chemical and engineering services.** 1.

**ACCELERATORS**—X L O and Diphenyl Guanidine.

**Dovan Chemical Corp.**

30 Church St. New York

**ACCELERATORS** — Two new accelerators: Vulcone and Di-ortho-tolylguanidine.

**E. I. du Pont de Nemours & Co., Inc.**
Dyestuffs Dept. Sales Div.
Wilmington, Del.

**ACCELERATORS**

Grasselerator 102
Grasselerator 552
Grasselerator 808

**Grasselli Chemical Co.**
Rubber Service Dept.
347 Madison Ave., New York

**ACCELERATORS**— Every lot is tested before shipment and a written guarantee of quality furnished.

**Roessler & Hasslacher Chem. Co.**
709 Sixth Ave. N. Y. City

**ACCELERATORS—A19, A7, Thiocarbanilid.**

**The RUBBER SERVICE Laboratories Co.**
611 Peoples Savings & Trust Bldg.
Akron Ohio

**ANTIMONY** Pentasulphide, golden and crimson, very fine, pure.

**Rare Metal Products Co.**
Belleville, N. J.
Direct Factory Representation

***The* BLUE LIST *of the Industry***

**Your Products Listed Here**

**reach buyers in rubber factories at a cost lower than is possible by any other method.**

**ARRANGE FOR YOUR LISTING TODAY!**

**ASBESTINE**— Specially prepared for use in Rubber. Send for liberal working sample.

SOLE PRODUCERS

**International Pulp Co.**
41 Park Row, New York City

**BEAD CABLES**— National Flat Woven and Pratt Patent Bead Cables.

**National Standard Co.**
Niles, Mich.

**BOLTON BIAS CUTTER**

Cuts cord or flat woven fabrics with equal ease and precision. In use all over the world.

**Spadone Machine Co., Inc.**
15 Park Row New York

**CALENDERS**—Embossing, for artificial leather, oil cloth etc.

**Textile-Finishing Machinery Co.**
83 Exchange Place, Providence, R. I.

**CARBON BLACK**—*Micronex* the world's standard gas black, universally known as the "King of Rubber Pigments."

**Binney & Smith Co.**
41 East 42nd St. New York City

**CARBON BLACK**

**Godfrey L. Cabot, Inc.**
*Manufacturers for forty years.*
940 Old South Bldg., Boston, Mass.
612 Metropolitan Bldg., Akron, O.

**CARBON BLACK**—*Aerfloted* Arrow Black for rubber compounding. Standard for grit-free uniformity.

**J. M. Huber, Inc.**
130 West 42nd St. New York

**CARBON BLACK** or any other compounding material used by rubber manufacturers can be marketed at low cost by listing it in *The Market Place.*

**CATALPO** — The universal and standard rubber pigment now being used in treads, solids, tubes, carcass frictions, etc.

**Moore & Munger**
33 Rector Street
New York City

***The Most Economical Form of Advertising***

**The Market Place Section of THE RUBBER AGE contains the *only* alphabetically arranged listings of small 'ads' available in the rubber industry. Your advertisement in this section will not only be easy to find, but it will produce excellent results at very moderate costs. Let us send you details.**

*THE MARKET PLACE Section Continued on Second Page Following.*

# Exports of Crude Rubber from Principal Producing Countries

*(Figures in Long Tons)*

| | British Malaya[1] | | | | | | | | Dutch East Indies[2] | | | French[3] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Gross Exports* | *Imports* | *Net Exports* | *Ceylon*[3] | *India & Burma*[3] | *Br. North Borneo*[4] *Sarawak*[4] | *Siam*[4] | *Java & Madura* | *Sumatra E. Coast* | *Other D.E.I.* | *Indo-China* | *Amazon Valley*[5] | *Total*[7] |
| 1923 | 252,016 | 70,432 | 181,584 | 37,112 | 6,416 | 5,433 | 1,744 | 1,718 | 32,938 | 44,002 | 57,822 | 5,606 | 19,859 | 394,263 |
| 1924 | 259,760 | 107,419 | 152,341 | 37,351 | 7,697 | 6,485 | 1,892 | 2,962 | 42,446 | 52,499 | 80,347 | 6,688 | 23,164 | 413,872 |
| 1925 | 316,825 | 158,022 | 158,803 | 45,684 | 10,082 | 8,460 | 2,308 | 5,378 | 46,643 | 62,678 | 119,271 | 7,881 | 25,307 | 492,495 |
| *1925:* | | | | | | | | | | | | | | |
| Jan. | 19,183 | 10,132 | 9,051 | 3,065 | 1,090 | 605 | 180 | 404 | 3,053 | 5,097 | 5,858 | 701 | 1,712 | 30,816 |
| Feb. | 21,622 | 10,071 | 11,551 | 2,207 | 1,121 | 469 | 148 | 283 | 3,490 | 5,139 | 8,569 | 586 | 2,977 | 36,540 |
| Mar. | 26,836 | 13,399 | 13,437 | 4,201 | 984 | 756 | 209 | 437 | 4,583 | 5,499 | 10,807 | 487 | 2,459 | 43,859 |
| Apr. | 22,414 | 11,751 | 10,663 | 3,250 | 684 | 483 | 164 | 384 | 4,121 | 4,663 | 8,536 | 482 | 1,585 | 35,015 |
| May | 26,667 | 12,979 | 13,688 | 2,600 | 585 | 717 | 189 | 489 | 3,624 | 4,455 | 12,006 | 599 | 2,588 | 41,540 |
| June | 27,894 | 14,706 | 13,188 | 3,502 | 831 | 1,046 | 195 | 430 | 4,187 | 4,667 | 10,644 | 833 | 1,653 | 41,176 |
| July | 24,809 | 16,192 | 8,617 | 4,487 | 680 | 955 | 218 | 533 | 4,719 | 5,244 | 10,516 | 411 | 1,142 | 37,522 |
| Aug. | 27,753 | 12,025 | 15,728 | 3,409 | 671 | 548 | 194 | 436 | 3,210 | 5,186 | 9,445 | 484 | 1,810 | 41,121 |
| Sept. | 29,425 | 12,913 | 16,512 | 4,758 | 745 | 766 | 218 | 533 | 3,364 | 4,913 | 10,628 | 764 | 2,140 | 45,341 |
| Oct. | 28,711 | 14,986 | 13,725 | 5,270 | 516 | 639 | 199 | 708 | 3,516 | 5,511 | 11,767 | 683 | 2,240 | 44,774 |
| Nov. | 31,648 | 14,904 | 16,744 | 3,980 | 1,044 | 838 | 186 | 411 | 4,657 | 6,349 | 11,958 | 991 | 2,620 | 49,778 |
| Dec. | 29,863 | 13,964 | 15,899 | 4,955 | 1,131 | 638 | 208 | 330 | 4,119 | 5,955 | 8,537 | 860 | 2,381 | 45,018 |
| | 316,825 | 158,022 | 158,803 | 45,684 | 10,082 | 8,460 | 2,308 | 5,378 | 46,643 | 62,678 | 119,271 | 7,881 | 25,307 | 492,495 |
| *1926:* | | | | | | | | | | | | | | |
| Jan. | 30,452 | 10,237 | 20,433 | 4,058 | 1,273 | 416 | 196 | 288 | 4,397 | 6,277 | 8,081 | 915 | 1,284 | 47,618 |
| Feb. | 30,440 | 8,306 | 22,134 | 4,941 | 725 | 488 | 141 | 253 | 4,474 | 5,734 | 6,801 | 554 | 2,759 | 49,004 |
| Mar. | 35,012 | 14,800 | 20,212 | 5,708 | 1,113 | 792 | 232 | 418 | 4,865 | 5,612 | 11,880 | 573 | 2,126 | 53,531 |
| Apr. | 23,727 | 10,565 | 13,162 | 3,484 | 590 | 679 | 251 | 294 | 4,522 | 4,598 | 6,208 | 410 | 2,318 | 36,516 |
| May | 31,231 | 10,604 | 20,627 | 3,600 | 691 | 927 | 157 | 279 | 4,742 | 5,293 | 8,606 | 502 | 1,353 | 46,777 |
| June | 30,624 | 11,764 | 18,860 | 3,906 | 452 | 779 | 160 | 275 | 5,440 | 6,111 | 9,844 | 549 | 1,213 | 47,589 |
| July | 28,824 | 15,280 | 13,544 | 4,800 | 938 | 911 | 242 | 438 | 4,929 | 5,522 | 12,864 | 1,521 | | |
| Aug. | 34,625 | 13,595 | 21,030 | 5,246 | 521 | 890 | 168 | 316 | 4,418 | 3,472 | 10,349 | 378 | | |
| Sept. | 35,913 | 13,972 | 21,941 | 6,027 | 652 | 887 | 213 | 457 | 4,326 | 6,757 | 10,971 | 681 | | |
| Oct. | 39,367 | 15,203 | 24,164 | 6,026 | | 805 | 271 | 385 | 4,193 | | | 661 | | |
| Nov. | 34,302 | 12,201 | 22,101 | | | | | | | | | 718 | | |
| Dec. | | | | | | | | | | | | | | |

(1) Malayan net exports cannot be taken as Malayan production since much of the imported rubber contains a high percentge of moisture and impurities which are eliminated before it is re-exported; the Malayan figures do not contain rubber exported as latex which on the basis of 3 pounds per gallon amounted to 99 tons in 1923, 957 tons in 1924 and 3,101 tons in 1925. (2) Ceylon Chamber of Commerce statistics until 1926. (3) Official statistics. (4) Figures for Sarawak, British North Borneo and Siam are imports from these territories into Singapore through which port practically their entire production moves. (5) Exports from "Other Dutch East Indies" are chiefly native rubber which contains one-third of moisture and impurities for which no allowance has been made in the statistics; rubber shipped as latex has not been included and amounted to 6,355 tons in 1923, 2,735 tons in 1924 and 6,207 tons in 11 months of 1925. (6) Exports through Para, Manaos and Iquitos. (7) This total includes the net exports from British Malaya and all the figures shown for the other territories.

# Net Imports of Crude Rubber into Principal Manufacturing Countries

*(Long Tons)*

| | *United States* | *United Kingdom* | *France* (abd) | *Germany* | *Canada* (ac) | *Japan* (ac) | *Italy* | *Russia* (ce) | *Australia* (cf) | *Belgium* (d) | *Netherlands* | *Sweden* (abcd) | *Norway* (abc) | *Denmark* (abd) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919 | 236,977 | 42,671 | 19,951 | 5,584 | 8,770 | 10,688 | 9,894 | 75 | 733 | 3,995 | 2,771 | 2,022 | 437 | 673 |
| 1920 | 248,762 | 56,844 | 15,868 | 11,890 | 11,912 | 6,015 | 6,123 | 62 | 1,040 | 3,840 | 5,510 | 1,567 | 241 | 479 |
| 1921 | 179,678 | 42,087 | 16,981 | 21,920 | 8,248 | 22,981 | 3,906 | 165 | 554 | 1,705 | 1,022 | 813 | 178 | 251 |
| 1922 | 296,267 | 11,724 | 27,644 | 27,546 | 9,366 | 16,449 | 6,430 | 2,453 | 2,649 | 172 | -3,807 | 1,248 | 321 | 87 |
| 1923 | 300,372 | 12,700 | 31,067 | 18,519 | 13,299 | 17,181 | 8,489 | 4,506 | 1,631 | 2,184 | 792 | 1,391 | 448 | 354 |
| 1924 | 317,747 | -11,550 | 34,488 | 22,727 | 14,420 | 19,612 | 8,764 | 824 | 3,127 | 2,688 | -807 | 1,781 | 669 | 473 |
| 1925 | 381,815 | 4,061 | 36,911 | 33,937 | 19,825 | 12,743 | 11,412 | 7,088 | 4,217 | 2,930 | 875 | 1,690 | 701 | 440 |
| *1925:* | | | | | | | | | | | | | | |
| January | 31,736 | -284 | 2,147 | 4,303 | 1,432 | 797 | 552 | 333 | 192 | 331 | 109 | 164 | 84 | 16 |
| February | 23,717 | -2,492 | 3,529 | 3,690 | 1,278 | 658 | 908 | 1,000 | 338 | 275 | 88 | 136 | 145 | 37 |
| March | 31,727 | -3,396 | 3,924 | 2,784 | 2,349 | 689 | 1,463 | 1,083 | 357 | 373 | 56 | 183 | 77 | 71 |
| April | 31,376 | -2,961 | 3,069 | 3,574 | 1,397 | 719 | 817 | 535 | 314 | 97 | 181 | 149 | 47 | 23 |
| May | 35,729 | -8,650 | 3,223 | 3,834 | 1,532 | 863 | 1,060 | 1,999 | 385 | 228 | 47 | 126 | 47 | 16 |
| June | 30,371 | 619 | 2,387 | 3,239 | 1,681 | 2,095 | 1,506 | 59 | 378 | 329 | 120 | 97 | 43 | 74 |
| July | 31,177 | 2,204 | 1,827 | 2,606 | 1,613 | 813 | 650 | 16 | 341 | 176 | 28 | 114 | 45 | 24 |
| August | 32,281 | 3,825 | 1,109 | 2,942 | 1,582 | 786 | 681 | 85 | 297 | 169 | 76 | 119 | 53 | 35 |
| September | 25,213 | 5,369 | 4,633 | 2,667 | 1,202 | 936 | 939 | 234 | 429 | 283 | 136 | 102 | 54 | 30 |
| October | 33,519 | 1,203 | 3,039 | 2,325 | 1,799 | 1,060 | 914 | 21 | 243 | 255 | 60 | 159 | 38 | 38 |
| November | 36,150 | 2,466 | 4,654 | 1,260 | 1,712 | 2,140 | 1,157 | 190 | 512 | 236 | -12 | 219 | 55 | 52 |
| December | 38,819 | 6,158 | 3,370 | 713 | 2,248 | 1,187 | 815 | 1,533 | 431 | 178 | -14 | 122 | 33 | 35 |
| *1926:* | | | | | | | | | | | | | | |
| January | 40,320 | 6,439 | 3,170 | 703 | 2,188 | 892 | 760 | 332 | 358 | 76 | 154 | 123 | 46 | 51 |
| February | 31,435 | 3,114 | 3,513 | 1,113 | 1,685 | 741 | 1,041 | 643 | 432 | 275 | 89 | 171 | 82 | 94 |
| March | 40,316 | 8,907 | 4,790 | 1,342 | 2,079 | 864 | 1,037 | 832 | 469 | 129 | 227 | 213 | 31 | 55 |
| Apr. | 33,416 | 8,275 | 4,834 | 1,781 | 1,615 | 1,868 | 865 | 402 | 431 | 71 | 93 | 204 | 27 | 23 |
| May | 28,704 | 6,773 | 2,937 | 1,848 | 1,239 | 1,010 | 705 | 200 | 386 | 186 | 241 | 110 | 24 | 47 |
| June | 23,795 | 5,894 | 2,327 | 1,655 | 1,188 | 1,465 | 1,070 | 983 | 546 | 269 | 214 | 178 | 20 | 74 |
| July | 34,267 | 6,758 | 2,603 | 2,202 | 1,552 | 1,447 | 800 | 176 | 586 | 212 | 480 | 195 | 34 | 27 |
| Aug. | 26,081 | 7,327 | 2,819 | 2,110 | 1,888 | | | 655 | | 303 | 596 | 199 | 52 | 55 |
| Sept. | 35,674 | 8,599 | 2,900 | 2,029 | 1,355 | | | 472 | | 283 | 430 | 159 | 43 | 27 |
| Oct. | 27,993 | 8,082 | | 2,423 | 1,865 | | | 585 | | | 2 | 210 | | |
| Nov. | 37,673 | | | | | | | | | | | | | |
| Dec. | | | | | | | | | | | | | | |

a—Including gutta percha. b—Including balata. c—Reexports not deducted. d—Believed to include scrap and reclaimed rubber. e—Russian statistics are exports from United Kingdom only to Russia. f—Australian annual statistics including 1924 are exports to Australia from Malaya, Ceylon, Dutch East Indies and United Kingdom; monthly figures and total for 1925 are exports from Malaya, Ceylon, and Java only. -Minus sign, reexports in excess of imports. *All statistics from original official trade returns.*

**ALL THE LEADERS**

**Are represented in this section. Purchasing agents can rely on the concerns listed as thoroughly reliable in every way.**

# The Market Place

2.

**CHEMICALS** — Accelerators
Trimene Base, Heptene, Monex, Crylene, Lithex, Aniline Oil.
*Clay*—Mineral Flour, Seminole (Georgia).
*Antioxidant*—VGB, a proven product.
Labels—all-rubber two color brands.
**Naugatuck Chemical Co.**
1790 Broadway, New York.

**CHEMICALS** and compounding ingredients; Clay, Whiting, Accelerators, Mineral Rubber.
**R. T. Vanderbilt Co.**
50 East 42nd St. New York City

**CHEMICALS** and Mineral Ingredients—Whiting, Clay, Talc, Barytes, Colors, Heavy Calcined Magnesia, Carbonate of Magnesia, Pumice Stone.
*Standard Since 1890*
**Whittaker, Clark & Daniels, Inc.**
245 Front St., New York

**CHEMICALS and COLORS**
for all classes of mixing and cure. Complete rubber laboratory service for our customers.
**Wishnick-Tumpeer, Inc.**
New York Chicago Cleveland Boston

**CHEMISTS** read your listing in the MARKET PLACE. There is no cheaper way to reach these prospects.
**Try It!**

**CLAYS** for the rubber trade.
ARGOSITE CLAY—Pulverized—Special
CONGAREE CLAY—Pulverized—Standard
**United Clay Mines Corp.**
General Offices — — Trenton, N. J.

**CONSULT BANNER**
Before You Buy
TIRE BUILDING MACHINES
**The Banner Machine Co.**
Columbiana, Ohio
Paul A. Frank, Akron, Ohio, Agent.

**CRUDE RUBBER** — All Grades. Washed - Dried - Milled.
*Send us Your Inquiries.*
**Gibraltar Rubber Corp.**
West New York, N. J.

**CRUDE RUBBER**
**BROKERS**
**Henderson Brothers Co., Inc.**
60 Beaver St., New York City
Members Rubber Exchange of N. Y.

**CRUDE RUBBER**
**Importers and Dealers**
Members Rubber Exchange of N. Y. and Rubber Exchange Clearing House
**Henderson, Helm & Co., Inc.**
44 Beaver St., New York
*Weekly Market Review on Request*

**CRUDE RUBBER**
***We Solicit Your Inquiries***
**H. Muehlstein & Co., Inc.**
41 East 42nd. St., N. Y. City
Offices in Akron, Chicago, Boston.

**CRUDE RUBBER**
**Importers**
Members Rubber Exchange of N. Y., Inc. and Rubber Exchange Clearing House, Inc.
**Charles T. Wilson Co., Inc.**
82 Beaver St., New York
AKRON OFFICE: 507 Second Nat'l. B'ldg.

**DIPHENYLGUANIDINE**
Aero Brand, product of the highest purity from dependable source of supply.
**American Cyanamid Co.**
511 Fifth Ave. New York City.

**DRY KILN**—for drying crude rubber and chemicals—Hunter Process.
**Carrier Engineering Corporation**
750 Frelinghuysen Ave. Newark N. J.

**ENGINEERS**
Machinists, Iron and Steel Founders
Standard and Special
Rubber Working Machinery
**The Adamson Machine Co.**
Akron, Ohio

Leading chemical firms are using *The Market Place* regularly. The cost is moderate and results sure!
**The Rubber Age**
250 West 57th Street, New York

**FABRICS**—Tire, cords, enameling ducks, drills, sheetings, osnaburgs.
**J. H. Lane & Co.**
250 West 57th St. New York City

**FABRICS**—Tire fabrics—coarse builders, chafers, breakers in all grades.
**New England Southern Mills**
LAWRENCE & CO.
24 Thomas St. New York
Boston, Philadelphia, Chicago, St. Louis, San Francisco

**FACTICE**—Prevents blooming, makes colors fast and a smoother batch.
**Stamford Rubber Supply Co.**
Stamford, Conn.

**FLUXITE — Liquid and**
Solid — A rubber softener and aging compound of great efficiency.
**Damascus Mnfg. Corp.**
E. 93rd. St. & Cassius Ave.,
CLEVELAND, OHIO

**GUAYULE**—"Duro" Brand washed and dried ready for compounding.
**Continental Rubber Co.**
120 Broadway New York

*THE MARKET PLACE Section Continued on Second Page Following.*

## Daily Spot Closing Prices of Ribbed Smoked Sheet Rubber—*New York Market, in Cents per Pound*

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1924** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jan. | 25¾ | 26¼ | 26¾ | 26½ | 26¾ | 25¼ | 26¾ | 26½ | 25¾ | 26¼ | 26¾ | 26¾ | 25½ | 25⅝ | 26¼ | 26 | 26¼ | 25⅝ | 25⅝ | — | 25¼ | 25¼ | 25½ | 24⅞ | 25¾ | 25¾ | — | — | 25¾ | — | 25¾ |
| Feb. | 25⅝ | — | — | 25¼ | 25⅝ | 25¼ | 26⅛ | 25¾ | 25⅝ | 26¼ | 25⅝ | 26¾ | 25½ | 25⅝ | 25¾ | 25¼ | — | 25⅝ | 25⅝ | 25½ | 25¼ | 25¼ | 25½ | — | 25¾ | 25¾ | — | — | 25¾ | — | 25¾ |
| Mar. | — | — | — | 24¼ | 25¼ | 24½ | 25⅛ | 25¾ | 25¾ | 25¾ | 25⅝ | 25¾ | 25½ | 25⅝ | 25¾ | 25¼ | — | 25⅝ | 25⅝ | 25½ | 25¼ | 25¼ | 25½ | — | 25¾ | 25¾ | — | — | 25¾ | — | 25¾ |
| Apr. | 22½ | 22½ | 24¾ | 24 | 24¼ | 24½ | 24⅝ | 24¼ | 25¼ | 25⅛ | 25⅝ | 25¾ | 25½ | 25⅝ | 25¾ | 25¼ | — | 25⅝ | 25⅝ | 25½ | 25¼ | 25¼ | 25½ | — | 25¾ | 25¾ | — | — | 25¾ | — | 25¾ |
| May | 22½ | 22½ | 22¾ | 22 | 22¼ | 22½ | 22⅝ | 23¼ | 23¾ | 23¾ | 23¾ | 23¾ | 23½ | 23⅝ | 23¾ | 23¼ | — | 23⅝ | 23⅝ | 23½ | 23¼ | 23¼ | 23½ | — | 23¾ | 23¾ | — | — | 23¾ | — | 23¾ |
| June | 18⅝ | 19¼ | 19¼ | — | 19¾ | 19⅞ | 19⅝ | 19⅝ | 19¾ | 19½ | 19½ | 19¾ | 19½ | 19¾ | 19¾ | 19½ | — | 19⅝ | 19⅝ | 19½ | 19¼ | 19¼ | 19½ | — | 19¾ | 19¾ | — | — | 19¾ | — | 19¾ |
| July | 23⅝ | 23¾ | — | 24 | 25 | 25⅛ | 25⅛ | 25⅛ | 25⅛ | 25⅛ | 25⅛ | 25⅛ | 25⅛ | 25⅛ | 25⅛ | 25⅛ | — | 25⅛ | 25⅛ | 25⅛ | 25⅛ | 25⅛ | 25⅛ | — | 25⅛ | 25⅛ | — | — | 25⅛ | — | 25⅛ |
| Aug. | — | 26¼ | 26¼ | 26¾ | 26⅝ | 26⅝ | 26⅝ | 26⅝ | 26⅝ | 26⅝ | 26⅝ | 26⅝ | 26⅝ | 26⅝ | 26⅝ | 26⅝ | — | 26⅝ | 26⅝ | 26⅝ | 26⅝ | 26⅝ | 26⅝ | — | 26⅝ | 26⅝ | — | — | 26⅝ | — | 26⅝ |
| Sept. | — | 26¾ | 29½ | 29¾ | 29¾ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | — | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | — | 29⅝ | 29⅝ | — | — | 29⅝ | — | 29⅝ |
| Oct. | 28 | 29½ | 29½ | 29¾ | 29¾ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | — | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | 29⅝ | — | 29⅝ | 29⅝ | — | — | 29⅝ | — | 29⅝ |
| Nov. | 34¾ | — | 34¾ | 34¼ | 34¼ | 34¼ | 34¼ | 34¼ | 34¼ | 34¼ | 34¼ | 34¼ | 34¼ | 34¼ | 34¼ | 34¼ | — | 34¼ | 34¼ | 34¼ | 34¼ | 34¼ | 34¼ | — | 34¼ | 34¼ | — | — | 34¼ | — | 34¼ |
| Dec. | 35½ | 35⅝ | 36 | 36⅜ | 36⅜ | 37⅜ | 37⅜ | 38 | 37⅝ | 37⅝ | 37½ | 37½ | 37⅝ | 37⅝ | 37⅝ | 37½ | 37⅜ | 38 | 38⅜ | 38⅜ | 38⅜ | 38⅜ | 38⅜ | 38⅜ | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| **1925** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jan. | — | 39¾ | 39¾ | — | 39 | 39 | 39¼ | 38½ | 38⅝ | 38⅞ | — | 37⅞ | 36½ | 36⅜ | 35 | 35⅝ | 35¾ | 34⅞ | 34⅞ | 34⅞ | 35 | 35½ | 36¼ | 36¼ | 35¾ | 35½ | 35½ | 35 | 35 | 35 | 35¾ |
| Feb. | — | 35¾ | 34⅝ | 34½ | 34½ | 34¼ | 35¼ | 35¼ | 35⅝ | 35¾ | 35¼ | 36 | 35⅞ | 36 | — | 36⅜ | 36¾ | 35⅝ | 36¼ | 36¾ | 36⅜ | 37¼ | 37⅜ | 37⅜ | 37⅞ | 38⅜ | 37⅞ | — | — | — | 36 |
| Mar. | — | 38¾ | 38⅝ | 38½ | 38¼ | 39½ | 39¾ | 39¾ | 39⅝ | 40 | 40¼ | 39¾ | 40⅞ | 40⅜ | 40¼ | 40 | 40⅛ | 41 | 41¼ | 41¼ | 41¼ | 42½ | 43¾ | 43¾ | 44 | 43⅝ | 43½ | 44¼ | 44½ | 44¼ | 41 |
| Apr. | 41¼ | 41⅝ | — | 41¾ | 41¾ | 42¾ | 42¾ | 43¾ | 43⅝ | 44¼ | 44 | 44¼ | 44¼ | 44¼ | 44¼ | 44¼ | 44½ | 44½ | 44¼ | 44 | 44 | 44 | 44 | 44 | 44 | 44¼ | 44½ | 45¾ | 45¾ | 45¾ | 43¾ |
| May | 45 | 45¼ | — | 47¼ | 46¾ | 48¾ | 50⅞ | 52½ | 55⅞ | — | — | 59 | 57 | 59¼ | 60¾ | 64¼ | 64¼ | 63 | 61¾ | 60¾ | 61¾ | 62¾ | 63 | 63 | 65 | 65⅝ | 65⅝ | 69½ | 69½ | 69½ | 58½ |
| June | 69½ | 72 | — | 74¾ | 75¾ | 88½ | 90⅛ | 95⅛ | 94⅝ | 99⅝ | 106⅛ | 76⅛ | 74¾ | 74¾ | 71⅛ | 71⅝ | 72⅝ | 73⅝ | 75⅛ | 76¼ | 117⅛ | 119 | 117½ | 112¼ | 82½ | 85⅝ | 87 | 89⅝ | 93¾ | 89¾ | 77½ |
| July | 81½ | 81⅞ | 85⅞ | 88⅝ | 85⅝ | 86¾ | 81¾ | 78¼ | 80½ | 71¾ | 72½ | 76½ | 81½ | 80¾ | 105⅝ | 110⅝ | 117 | 116¾ | 118½ | 80¼ | 83¾ | 82½ | 82½ | 82¼ | 85¼ | 85¾ | 89¾ | 91¼ | 91¼ | 103¾ | |
| Aug. | 94½ | — | 95½ | 88¾ | 81¾ | 81¾ | — | — | 86½ | 92 | 92½ | 97½ | 104½ | 105½ | 105⅝ | 101½ | 99¾ | 78¼ | 80¼ | 94¾ | 92 | 93¾ | 93¾ | 90 | 89 | 89¾ | 99½ | 101¾ | 99¼ | 100¾ | 98 |
| Sept. | 88¼ | 87¼ | 85 | 92 | 97½ | 99 | 97½ | 99 | 98¼ | 99¼ | 100¼ | 101¾ | 104¾ | 105⅝ | 101 | 99¾ | 99¾ | 99¾ | 99 | 99¼ | 99 | 99¼ | 99¼ | 99¼ | 98 | 98¾ | 99½ | 99¼ | 100¾ | 100¾ | 98 |
| Oct. | 91¼ | 91¼ | 92 | — | 98¾ | 100¾ | — | 108 | 109 | 109¼ | 106¼ | 105½ | 105⅝ | — | 101 | 99¾ | 99¾ | 99¾ | 99¾ | 99¾ | 99¾ | 99¼ | 99¼ | 99¼ | 99¼ | 99¼ | 99¼ | 99¼ | 99¼ | 100¾ | 98 |
| Nov. | — | 99¼ | — | 98¾ | 98¼ | — | 108¼ | — | 109¼ | 109¼ | 106¼ | 105½ | 105⅝ | — | 101 | 99¾ | 99¾ | 99¾ | 99¾ | 99¾ | 99¾ | 99¼ | 99¼ | 99¼ | 99¼ | 99¼ | 99¼ | 99¼ | 99¼ | 100¾ | 98 |
| Dec. | 106¾ | 108¾ | 107¾ | 107¾ | 108¼ | — | 109 | 109¼ | 109¼ | 109¼ | 106¼ | 105½ | 105⅝ | — | 101 | 99¾ | 99¾ | 99¾ | 99¾ | 99¾ | 99¾ | 99¼ | 99¼ | 99¼ | 99¼ | 99¼ | 99¼ | 99¼ | 99¼ | 100¾ | 98 |
| **1926** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jan. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Feb. | 67 | 67¼ | 66¾ | 66¾ | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 | 67 |
| Mar. | 55 | 58 | 53 | 53¾ | 53¼ | 57½ | 56½ | 56½ | 55½ | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 |
| Apr. | 59 | — | 59 | — | 59 | 58 | — | — | 53 | — | — | 51½ | 50 | 50 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 |
| May | 48¼ | — | 50 | 50¾ | 49½ | 49¾ | 49¾ | 49¾ | — | 49¼ | 49¼ | 48½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ | 47½ |
| June | 41¼ | 42 | 41½ | 42 | 41½ | 41½ | 41½ | 42 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| July | 42 | 42 | 42 | 41½ | — | 41½ | 41½ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ | 41¾ |
| Aug. | 38¾ | 38½ | 38½ | 37 | 37 | 38¾ | 39 | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ | 40¾ |
| Sept. | 40¾ | 40¾ | 40¾ | — | — | — | 42¾ | 42½ | 42¾ | 42¾ | 42¾ | 42¾ | 42½ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ |
| Oct. | 43 | 43 | — | 43¼ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ | 42¾ |
| Nov. | 41¼ | — | 41 | 41¼ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ | 41½ |
| Dec. | 36¾ | 37½ | 37½ | 37½ | — | 37 | 37 | 37½ | 37 | 37 | 37 | 37½ | — | 37½ | 37¾ | 38 | 38 | 38 | 38 | 38 | 38 | 38½ | 38¾ | 38¾ | 38½ | 38½ | 38½ | 38½ | 38½ | 38½ | 38½ |

## Automobile Production

| | Passenger Cars | | | Trucks | | |
|---|---|---|---|---|---|---|
| | Total | United States | Canada | Total | United States | Canada |
| 1920 | 1,883,158 | 1,799,522 | 83,636 | 322,039 | 311,531 | 10,508 |
| 1921 | 1,514,000 | 1,452,902 | 61,098 | 147,550 | 142,402 | 5,148 |
| 1922 | 2,397,827 | 2,302,923 | 94,904 | 251,434 | 244,285 | 7,149 |
| 1923 | 3,719,164 | 3,589,936 | 129,228 | 378,288 | 361,078 | 17,210 |
| 1924 | | | | | | |
| January | 293,824 | 283,983 | 9,841 | 30,785 | 29,038 | 1,747 |
| February | 343,460 | 331,388 | 12,072 | 32,974 | 31,295 | 1,679 |
| March | 357,045 | 341,851 | 15,194 | 36,505 | 34,466 | 2,040 |
| April | 346,405 | 331,957 | 14,448 | 38,037 | 36,104 | 1,933 |
| May | 286,324 | 271,033 | 15,291 | 35,408 | 33,655 | 1,753 |
| June | 225,079 | 214,322 | 10,757 | 29,135 | 28,185 | 950 |
| July | 244,544 | 235,925 | 8,619 | 26,448 | 25,341 | 1,107 |
| August | 255,232 | 249,796 | 5,436 | 28,714 | 27,834 | 880 |
| September | 263,528 | 256,940 | 6,588 | 32,015 | 30,663 | 1,351 |
| October | 260,881 | 254,524 | 6,357 | 32,533 | 31,263 | 1,270 |
| November | 204,343 | 198,381 | 5,962 | 27,956 | 26,875 | 1,081 |
| December | 182,099 | 174,899 | 7,200 | 27,596 | 25,906 | 1,690 |
| Total | 3,262,764 | 3,144,999 | 117,765 | 378,106 | 360,625 | 17,481 |
| 1925 | | | | | | |
| January | 212,921 | 204,620 | 8,301 | 28,198 | 26,633 | 1,565 |
| February | 252,803 | 242,024 | 10,779 | 34,467 | 32,774 | 1,693 |
| March | 332,154 | 319,140 | 13,014 | 45,168 | 43,079 | 2,089 |
| April | 391,302 | 375,787 | 15,515 | 47,898 | 46,322 | 1,576 |
| May | 382,714 | 364,363 | 18,351 | 43,380 | 41,492 | 1,888 |
| June | 364,806 | 350,557 | 14,249 | 38,141 | 36,347 | 1,794 |
| July | 358,554 | 347,414 | 11,140 | 41,915 | 40,070 | 1,845 |
| August | 221,831 | 214,401 | 7,430 | 37,843 | 36,357 | 1,486 |
| September | 272,425 | 262,053 | 10,372 | 60,452 | 57,972 | 2,480 |
| October | 406,572 | 392,651 | 13,921 | 46,003 | 44,309 | 1,694 |
| November | 336,358 | 327,617 | 8,741 | 40,077 | 37,840 | 2,237 |
| December | 285,199 | 277,701 | 7,493 | 34,477 | 32,746 | 1,731 |
| Total | 3,817,639 | 3,678,328 | 139,311 | 498,019 | 475,941 | 22,078 |
| 1926* | | | | | | |
| January | 284,703 | 272,922 | 11,781 | 33,461 | 29,763 | 3,698 |
| February | 334,524 | 319,763 | 14,761 | 41,685 | 37,608 | 4,077 |
| March | 399,105 | 381,116 | 17,989 | 49,233 | 44,848 | 4,385 |
| April | 401,836 | 383,907 | 17,929 | 53,887 | 50,314 | 3,573 |
| May | 394,569 | 373,140 | 21,429 | 51,343 | 47,838 | 3,505 |
| June | 358,360 | 339,542 | 18,818 | 47,043 | 44,110 | 2,933 |
| July | 328,816 | 315,863 | 12,953 | 41,847 | 39,592 | 2,255 |
| August | 393,040 | 380,258 | 12,782 | 47,907 | 45,404 | 2,503 |
| September | 363,537 | 350,913 | 12,624 | 51,299 | 46,428 | 4,871 |
| October | 300,142 | 289,547 | 10,595 | 49,965 | 42,890 | 7,075 |
| November | 226,253 | 219,479 | 6,774 | 39,388 | 36,334 | 3,054 |
| December | | | | | | |

*Revised Figures

## U. S. Consumption of Crude Rubber

*(Rubber Association of America statistics raised to 100 per cent—All figures in long tons)*

| | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 |
|---|---|---|---|---|---|---|
| January | 5,045 | 16,938 | 30,106 | 29,058 | 29,638 | 32,196 |
| February | 5,955 | 14,767 | 30,149 | 25,736 | 29,761 | 31,136 |
| March | 9,190 | 21,408 | 36,629 | 28,385 | 33,498 | 32,936 |
| April | 13,084 | 19,294 | 29,085 | 27,129 | 34,139 | 32,696 |
| May | 16,023 | 23,246 | 36,155 | 25,845 | 35,322 | 29,364 |
| June | 16,142 | 31,713 | 24,272 | 22,753 | 35,822 | 28,598 |
| July | 18,310 | 24,522 | 17,685 | 23,396 | 36,053 | 27,577 |
| August | 23,649 | 29,361 | 20,359 | 28,962 | 35,909 | 34,444 |
| September | 16,705 | 24,410 | 17,594 | 31,497 | 31,691 | 32,904 |
| October | 16,814 | 26,881 | 21,321 | 31,520 | 29,047 | 29,836 |
| November | 14,105 | 24,950 | 20,437 | 27,289 | 28,853 | 28,080 |
| December | 15,482 | 25,070 | 21,902 | 27,199 | 28,748 | |
| TOTALS | 170,504 | 282,560 | 305,694 | 328,769 | 388,481 | |

Monthly statistics covering shipments of various classes of rubber goods from the United States may be secured free of charge from the Rubber Division, Bureau of Foreign & Domestic Commerce, Washington, D.C.

# The Market Place


**HEELS, soles and strips**
We can make any special brand with your molds or with ours. Best quality at the lowest price. Consult us.
**P. & B. Rubber Mfg. Co., Inc.**
Laurel Hills, Long Island, N. Y.

**MOLDS AND CORES—**
Tire building equipment; general machine work.
**The Akron Equipment Co.**
Akron, Ohio

**RECLAIMED RUBBER**
We specialize in fine Grey, Black and Red Reclaimed Rubber.
*Send us Your Inquiries*
**The Defiance Rubber Co.**
Defiance, Ohio

**LINERS — PROCESSED**
For
Various Rubber Stocks
**The Cleveland Liner & Mfg. Co.**
5508 Maurice Ave., Cleveland, O.

**MOLDS & CORES**—Tire building machines; tire finishing stands; tubing machines; hydraulic presses.
**The Akron Standard Mold Co.**
Akron, Ohio

**RECLAIMED RUBBER**—
Uniformity, reliability, cleanliness.
**Pequanoc Rubber Co.**
Butler, N. J.

**MACHINERY—**
Heater Presses, Molds and Cores, Tubing Machines.
**The Williams Foundry & Mach. Co.**
"In Business Since 1888"
Akron, Ohio

**MOLDS AND CORES —**
Also Non-Skid Engraving Machines. Licensees for Watch-case Heaters and India Cores & Chucks.
**The Franz Foundry & Machine Co.**
Akron, Ohio

**RECLAIMED RUBBER**
**of Standardized Quality.**
NO. 188 FOR TUBES
**Philadelphia Rubber Works Co.**
New York Akron Philadelphia

**MANDRELS--CIRCULAR**
**and Economy Calender Shells**
Prompt Service—Let us quote you.
**The Clyde E. Lowe Co.**
2976 E. 81st St., Cleveland, Ohio

**MOLDS & CORES**—for automobile tires; general machine work.
**Kuhlke Machine Co.**
Akron, Ohio

**RECLAIMED RUBBER**—
for all purposes.
**Rubber Regenerating Co.**
Naugatuck, Conn.

**MICA** — Water Ground and Water Floated — 160 Mesh —Absolutely Free from Grit. Akron Stocks, also Factory Shipments.
**The C. P. Hall Co.**
116 Central Savings & Trust Bldg., Akron

**"NU-GUM" RUBBER**
Produced from No. 1 Floating Tubes. Absolutely pure — no oils —no compound added. *Specific Gravity*, .98.
**E. L. Bullock & Sons, Inc.**
99 John St. New York City

**RECLAIMED RUBBER**
A standardized grade for every requirement.
**U. S. Rubber Reclaiming Co., Inc.**
100 E. 42nd St., New York, N. Y.
*"43 Years Serving the Industry Solely as Reclaimers"*

**MICA**—160 mesh—water ground —water floated—free from foreign matter.
Stocks carried at Trenton, N. J.— Cleveland, O.—Chicago, Ill.
**The Harshaw Fuller & Goodwin Company**
Hanna Building, Cleveland, Ohio

**PINE TAR** — Retort "Sunny South", "Pentarco", "American". Brands for Tires, Tubes, Mechanicals,—Reclaim. *The Best Softener*
**E. W. Colledge**
P. O. Box 356 Jacksonville, Fla.
Agents in New York, Chicago, Cleveland.

**RECLAIMED RUBBER**
**The Xylos Rubber Co.**
**Akron, Ohio**
CAPACITY 250,000 POUNDS DAILY

**MOLDS**
**FOR TIRES, MECHANICAL GOODS & DRUGGIST SUNDRIES.**
**The Akron Rubber Mold & Machine Co.**
AKRON, OHIO.

**POWER EQUIPMENT**
Boilers — Compressors — Pumps
Generators — Tanks — Heaters
Rubber Machinery
**F. William Stocker**
Hoboken, New Jersey.

**RED OXIDE**—A special grinding, guaranteed uniform in color and quality.
**Joseph A. McNulty**
114 Liberty St. New York City


*THE MARKET PAGE Section Continued on Next Page.*

# The Market Place

4.


**RUBBER**— Crude and scrap, all grades.

**H. Muehlstein & Co.**

Liggett Bldg. New York

Akron, Chicago, Boston, Hoboken

**SANITARY GOODS**—

Dress Shields, Baby Pants, Aprons, Elastic Belts, Bloomers, Stepins, Bibs, Guimps and Brassieres.

SPECIAL GOODS CUT TO ORDER

**Rand Rubber Co., Inc.**

Sumner Ave. & Halsey St., Brooklyn, N. Y.

**TIRES**

"Goes a long way to make friends"

**General Tire & Rubber Co.**

Akron, Ohio

IF YOU need a light rubber for padding or shock absorbing, you should use RUBBER FOAM (in sheets).

Waterproof; will never rot; one-fourth the weight of cork. *Write for booklet.*

**C/M Company of America**

181 N. Dearborn St., Chicago, Ill.

EXCLUSIVE DISTRIBUTORS

**STEARIC ACID**

STEAREX, the product standardized for rubber compounding.

**Binney & Smith Co.**

41 East 42nd St., New York City

**TUBING, INSULATING and Straining Machinery**

"Perfected" equipment for inner tubes, treads, and tire beads. Circular hose looms.

**John Royle & Sons**

Paterson, New Jersey

**RUBBER PRODUCTS**

Sanitary Goods, Sheetings, Bathing Caps, Aprons, Rubber Specialties.

*Sheet Gum Cut to Pattern*

RANDPRINT RUBBER

**Rand Rubber Co., Inc.**

Sumner Ave. & Halsey St., Brooklyn, N. Y.

**STRIP CUTTING MACHINES**

For cutting all rubber, composition and plain or impregnated fabrics.

**Cameron Machine Co.**

61 Poplar St., Brooklyn, N. Y.

**USED MACHINERY**

Mills, Calenders, Grinders, Washers

New and Old Rubber Scrap

Rubber Cloth Remnants

**M. Norton & Co.**

Locust St. Medford, Mass.

**RUBBER PRODUCTS**

***Manufacturers of all classes of Rubber Goods.***

**United States Rubber Co.**

1790 Broadway, New York City

**SULPHUR**—*"Tire"* Brand Superfine; *"Tube"* Brand Velvet; quality Sulphur for the rubber trade.

**Stauffer Chemical Co.,**

of Texas.

Seanlon Bldg. Houston, Texas

San Francisco, Cal. Chauncey, N. Y.

**WHITING—Domestic**

RUBBER MAKERS STANDARD

**Wm. S. Gray & Co.**

342 Madison Ave., New York

**RUBBER SCRAP**

**Always Buying and Selling**

Rubber Waste, Cured and Uncured, Hard Rubber, Balata, Gutta Percha.

**HERMAN WEBER**

Newark & Jackson Sts., Hoboken, N. J.

**TECHNOLOGIST** — Testing, formulæ, costs, experimental work on all classes of rubber products. Litigation.

**Fred'k. J. Maywald, F.C.S.**

5 William St., Belleville, N. J.

**WHITING & PARIS WHITE**

manufactured from *Genuine English Chalk* and *Cliffstone*—no adulterations.

**Southwark Mfg. Co.**

Camden New Jersey

**RUBBER SUBSTITUTES**

White, brown and black.

**Carter Bell Mfg. Co.**

150 Nassau St. New York

**TESTING MACHINES**

U. S. ABRASION TESTER

RUBBER TENSILE TEST MACHINES

*Write for Descriptive Literature*

**Henry L. Scott Co.**

P. O. Box 963 Providence, R. I.

**WOOD FLOUR** (wood pulp)

FINELY POWDERED WHITE PINE WOOD Like Flour—Uniform in Quality

*Send for Samples*

**Becker, Moore & Company, Inc.**

MANUFACTURERS

North Tonawanda, New York

**SANITARY GOODS** — Dress Shields, Reducing Garments, Sheetings, Aprons, Bathing Caps, etc.

**I. B. Kleinert Rubber Co.**

485 Fifth Ave., N. Y. City

**TIRES—For Every Transportation** need from the Ford Runabout to the heaviest truck and Multiple passenger coach.

**Fisk Rubber Co.**

250 West 57th St., N. Y. City

**ZINC OXIDES** — Including KADOX and "Albalith."

**The New Jersey Zinc Sales Company**

New York Pittsburgh Chicago

Cleveland San Francisco

# REVIEW DESK

RUBBER OUTWEARING METAL. October issue, *Chemical & Metallurgical Engineering*, New York.

The editors of this business paper in writing of the growing use of rubber in factory equipment where resistance to abrasion is one of the most important considerations point to its use in conveyor belts, which in many cases carry millions of tons of abrasive materials without failure of the thin rubber cover.

The authors tell of a mill in a cement plant, charged with 45,000 pounds of steel balls and lined with rubber sheet one inch in thickness, which after ninety days of continuous operation, showed such slight wear that the cloth imprint on its surface could still be seen. After fourteen months of continuous service, at no place did the wear exceed one-sixty-fourth of an inch.

Similar tests on grinding mills lined with rubber and handling hard quartz silver ore showed good results. A capacity increase of 15 per cent without increased power-consumption, and with no sacrifice in fineness of product, was effected.

The authors cite many other examples of the protection afforded by rubber linings to the wearing parts of rotating machinery. In one case a coating of rubber one-eighth of an inch in thickness was in excellent condition after ten months' service, in contrast to the previous necessity for replacements each six weeks of the bronze parts such sheeting protected.

• • •

HILL CLUTCH MILL EQUIPMENT. Catalog No. 26. In three sections. 258 pp. Hill Clutch Machine & Foundry Co., Breakwater Ave. and 65th St., Cleveland, Ohio.

The first section of this large catalog describes and illustrates a new flexible coupling, but a large part is devoted to the "Cleveland Type" Oil Film Bearing in which the rotating shaft is supported without metallic contract on a nearly frictionless film of oil. Section B covers the application of the patented "Smith Type" Hill Clutch pulleys and cut-off couplings and gives not only a complete horse-power table from which friction clutch or plain pulleys may be chosen to meet any requirements, but full data and dimension tables. The transmission of power by belting, and applications of belt tighteners are discussed in detail.

Section C describes both American and English systems of rope drives; agitator designs, parts and gearing; tooth, spur and bevel gears; speed transformers; and gives a great deal of pertinent engineering data, including bolt strengths and dimensions, pipe dimensions, threads and tap drills, sheet and wire gauges, fusion temperatures, table of allowable loads on structural shapes, concrete data, trigonometric functions, etc.

• • •

YEAR BOOK AMERICAN ENGINEERING STANDARDS COMMITTEE. 1926. 76 pp. American Engineering Standards Committee, 29 W. 39th St., New York.

The outstanding developments in the work of the American Engineering Standards Committee during 1925 are briefly summed up in the first part of this Year Book, and the purpose, organization and method of work outlined. It contains full information regarding standardization projects which had an official status before the Committee on Jan. 31, 1926 and gives a list of cooperating bodies and sustaining members.

• • •

MECHANICAL RUBBER GOODS. Catalog No. 20. 97 pp. 6″ x 9″. Pioneer Rubber Mills, San Francisco, Cal.

The complete line of mechanical rubber goods manufactured by the Pioneer company is described and illustrated in this new catalog. In many instances, illustrations are in color and include pictures showing the products in use. Large sections are devoted to various types of belting, hose, mats and matting, molded rubber goods and packings. To the manufacture of mechanical rubber goods, the Pioneer Rubber Mills bring an experience of over 30 years.

## INDEX TO ADVERTISERS


A

Adamson Machine Co. ..... 361
Akron Equipment Co. ..... 363
Akron Rubber Mold & Machine Co. ..... 319-363
Akron Standard Mold Co., The ..... 363
American Cyanamid Co. ..... 352-361

B

Banner Machine Co., The ..... 361
Barrett Co., The ..... 348
Becker, Moore & Co., Inc. ..... 364
Binney & Smith Co. ..... 336-359
Bullock & Sons, Inc., E. L. ..... 363

C

Cabot, Inc., Godfrey L. ..... 359-368
Cameron Machine Co. ..... 340-364
Carrier Engineering Corp. ..... 340-361
Carter-Bell Manufacturing Co., The ..... 354-363
Cleveland Liner & Mfg. Co. ..... 363-367
C/M Company of America ..... 364
Colledge, E. W. ..... 340-363
Continental Rubber Co. ..... 348-361

D

Damascus Mnfg. Co. ..... 361
Defiance Rubber Co. ..... 348-363
Dovan Chemical Corp. ..... 359
du Pont de Nemours & Co., E. I. ..... 359

E

Equipment Co., Inc. ..... 347

F

Fisk Rubber Co. ..... 356-364
Franz Foundry & Machine Co., The ..... 363

G

General Tire and Rubber Co. ..... 364
Gibraltar Rubber Corp. ..... 361
Grasselli Chemical Co. ..... 350-359
Gray & Co., Wm. S. ..... 347-364

H

Hall Co., The C. P. ..... 352-363
Harshaw, Fuller & Goodwin Co. ..... 347-363
Henderson Bros. Co., Inc. ..... 350-361
Huber, J. M., Inc. ..... 334-359

I

India Machine and Rubber Mold Co. ..... 347
International Pulp Co. ..... 337-359

K

Kleinert Rubber Co., I. B. ..... 354-364
Kuhlke Machine Co. ..... 354-363

L

Lane and Co., J. H. ..... 355-360
Lawrence & Co. ..... 361
Lowe Co., The Clyde E. ..... 363

M

Maywald, Fred'k. J. ..... 364
McNulty, Joseph A. ..... 363
Moore & Munger ..... 359
Muehlstein & Co., Inc., H. ..... 354-361

N

National Standard Co. ..... 340-359
Naugatuck Chemical Co. ..... 322-361
New Jersey Zinc Sales Co. ..... 340-364
Norton & Co., M. ..... 364

P

P. & B. Rubber Mfg. Co. ..... 363
Pequanoc Rubber Co. ..... 352-363
Philadelphia Rubber Works Co. ..... 335-363

R

Rand Rubber Co., Inc. ..... 354-364
Rare Metal Products Co. ..... 359
Roessler & Hasslacher Chemical Co., The ..... 359
Royle & Sons, John ..... 338-364
Rubber Regenerating Co. ..... 318-363
Rubber Service Laboratories Co., The ..... 359-363

S

Scott Co., H. L. ..... 320-364
Southwark Mfg. Co. ..... 364
Spadone Machine Co. ..... 359
Stamford Rubber Supply Co. ..... 347-361
Stauffer Chemical Co. ..... 332-364
Stocker, F. William ..... 363

T

Textile Finishing Machine Co., The ..... 348-359

U

United Clay Mines Corp. ..... 340-361
U. S. Rubber Co. ..... 366-363
U. S. Rubber Reclaiming Co. ..... 363

V

Vanderbilt, R. T., Co. ..... Front Cover-317-361

W

Weber, Herman ..... 363
Williams Foundry & Machine Co., The ..... 354-363
Wilson Co., C. T. ..... 350-361
Wishnick-Tumpeer, Inc. ..... 338-361
Whittaker, Clark & Daniels ..... 361

X

Xylos Rubber Co., The ..... 363
The Market Place ..... 359, 361, 363, 364

TRADE

MARK

# United States Rubber Company

MAIN OFFICE:

1790 Broadway, New York

Fifty-Three Factories
Branches in all Principal Cities

*Manufacturers of All Classes of Rubber Goods, including—*

"U. S." ROYAL CORD AND USCO BALLOON TIRES
"U. S." ROYAL CORD AND USCO CORD TIRES
"U. S." ROYAL CORD MOTORCYCLE BALLOON TIRES
"U. S." ROYAL CORD MOTORCOACH TIRES
"U. S." ROYAL CORD HEAVY SERVICE TIRES
"U. S." HEAVY DUTY CUSHION, CUSHION, and
HIGH SIZE CUSHION SOLID TRUCK TIRES
"U. S." ROYAL, GREY, AND USCO TUBES
"U. S." BICYCLE TIRES, REPAIR MATERIALS, AND ACCESSORIES
"U.S." AUTO TOP MATERIALS "U. S." SPRING-STEP RUBBER HEELS USKIDE SOLES
"U. S." RUBBER FOOTWEAR KEDS SNUG-LER FELT FOOTWEAR
"U. S." RAYNSTER RAINCOATS BELTING—PACKING—HOSE HARD RUBBER PRODUCTS
"U. S." TILE FLOORING USCO SHEET FLOORING NAUGAHYDE LUGGAGE
"U. S." ROYAL GOLF BALLS "U. S." DRUGGIST SUNDRIES
"U. S." PARACORE INSULATED WIRE AND CABLE
"U. S." BATHING APPAREL

# United States Rubber Export Co., Ltd.

Exporters of the Products of

United States Rubber Company

AND

Dominion Rubber Company, Limited

MAIN OFFICE:

1790 Broadway, New York, U. S. A.

*Branches and Distributing Agencies in all leading cities of the World*

# BLUE PROCESSED LINERS

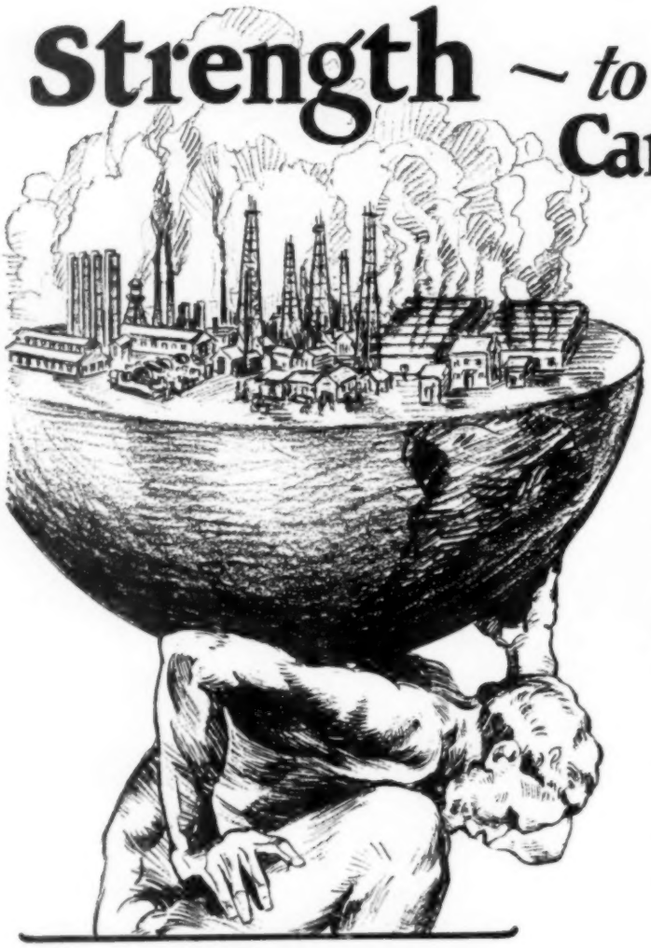
## Tried—
## Tested—
## Proved

THE CLEVELAND LINER & MFG. CO.

5508 MAURICE AVE.

CLEVELAND, OHIO

# Strength ~ *to assure* Carbon Black



## Sound Resources

HAVE you ever wondered if Godfrey L. Cabot, Inc., had the sound basic resources to insure an ample supply of carbon black—even in time of shortage? Here's the answer and you shall be the Judge:

Godfrey L. Cabot, Inc.'s, resources are in excess of $7,000,000 and include 130,000 acres of gas lands where half a million dollars are spent annually to prospect for gas.

There are 300 operating wells feeding over 450 miles of pipe line that supply carbon black factories in five states and also 12 cities and towns.

Public Utility Plants, Gas Compressor Booster Stations, and many other resources of the highest rating add solidarity and make Godfrey L. Cabot, Inc., one of the great natural gas producers of the world.

Vast natural gas resources and experience in carbon black production are the best possible insurance of an ample carbon black supply at less than average cost.

Our facilities to serve you promptly embrace stocks in the following cities:

Akron Boston Cincinnati
Chicago Montreal New York
Trenton San Francisco St. Louis
Cleveland Pittsburgh

and principal foreign centers.

# CARBON BLACK

**GODFREY L. CABOT, INC.**
940 OLD SOUTH BUILDING, BOSTON.